Tech Task Force Meeting
November 7, 2002

We continue to be working some overall themes:

1. How do we present information about design possibilities so people can easily understand and compare them?

2. How do we store this information and make is easily accessible over the Web?

3. What technical tools do we use to build these systems -- Macromedia Flash, VRML, etc.

4. How will people use the tools and the information they contain?

5. How will people put new information into the system?

6. How do we ensure that the systems are useful, and also how do we ensure that the systems will be used?

Tech Task Force Meeting
November 7, 2002

Today's Agenda

1. Current status of the MapJunction and Mapview system for storing and displaying design data

2. Presentation from Ken Goulding of Sasaski & Co. Ken will discuss using Flash to overlay information on plans. He has also worked on systems to put master plans online, as well as using data to drive Flash graphics. For a look at some his work, go to http://www.boston.com/beyond_bigdig/ you will see an example of how Flash can be used in exciting ways.

3. Review of status of the park designs....especially how to make these tools useful to the designers, as well as for public review

4. New items

The MapJunction Archive

Presentation to Technology Task Force

November 7, 2002

Agenda

Agenda

- Goals for MapJunction Archive

Agenda

- Goals for MapJunction Archive
- Importance and Examples of Comparisons

Agenda

- Goals for MapJunction Archive
- Importance and Examples of Comparisons
- Evaluate some new directions

Agenda

- Goals for MapJunction Archive
- Importance and Examples of Comparisons
- Evaluate some new directions
- Get Feedback

Past

Past

Present

Past
Present
Future

Past
Present
Future

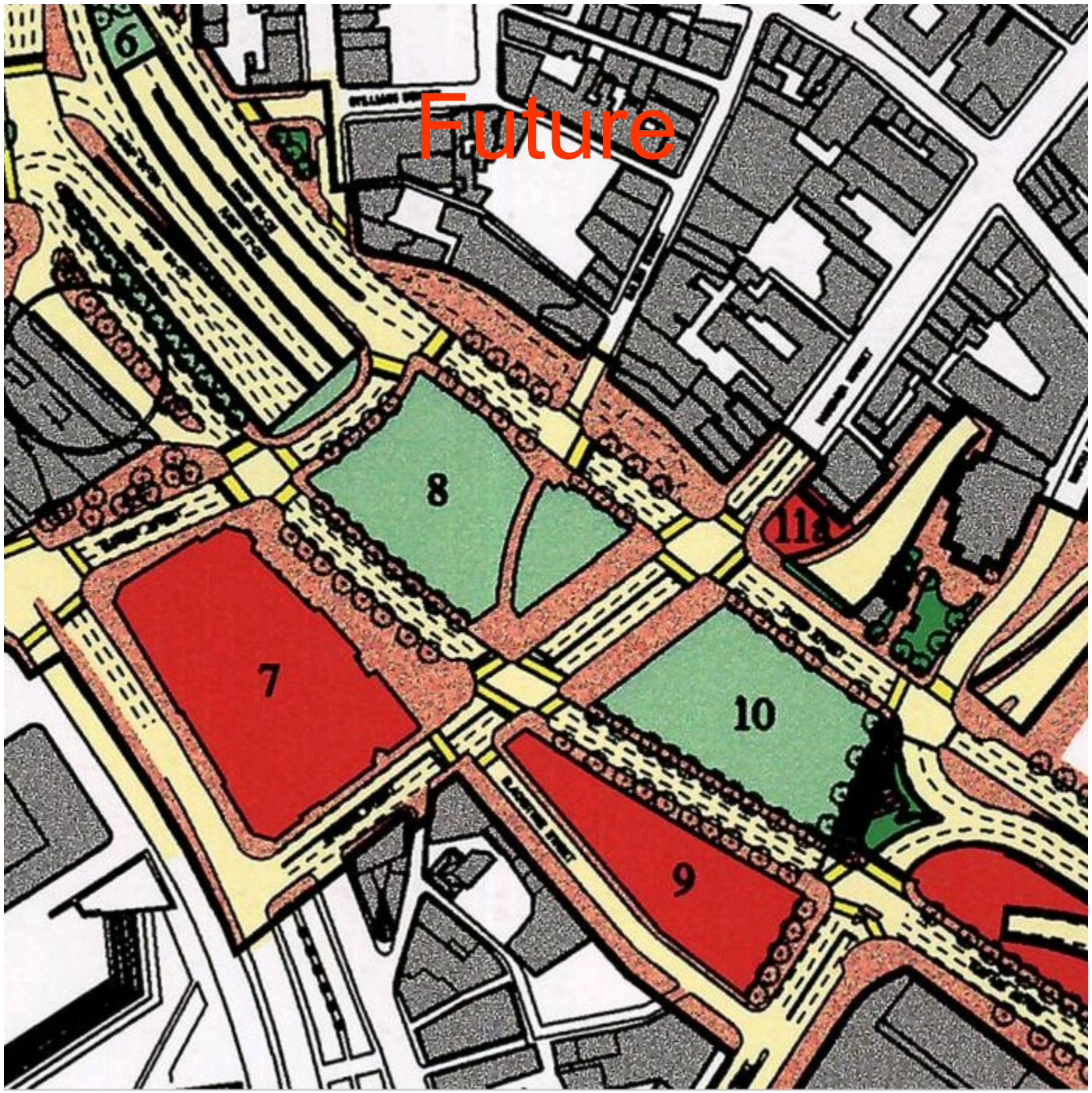
One view

Past
Present
Future

One view
One system

Past
STILLMAN
CHARLESTOWN
HAYMARKET SQUARE
CROSS ST.
MORTON
ENDICOTT
SALEM
BLACKSTONE
UNION
HANOVER
N. CENTRE
BARRETT
ST. JOHN
FRIEND
MARSHALL ST.
MARSH LANE
SALT LANE
CREEK SQ.
MECHANIC
COURT SQUARE

Present


Future
6
8
7
10
9
11a

Add Information:

Add Information:
3D models

Add Information:

3D models

Renderings

Add Information:

3D models

Renderings

Quicktime VR

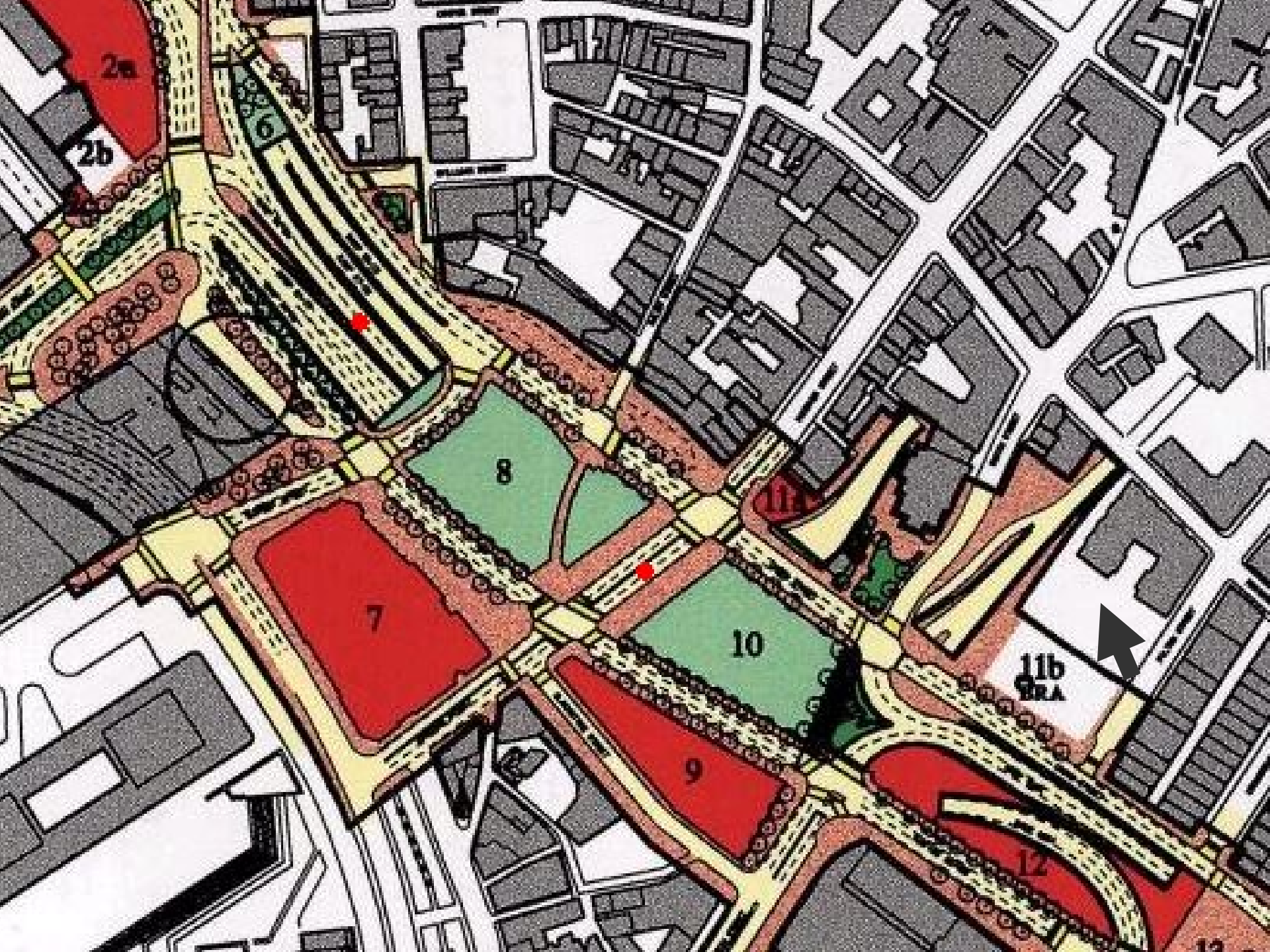
Add Information:

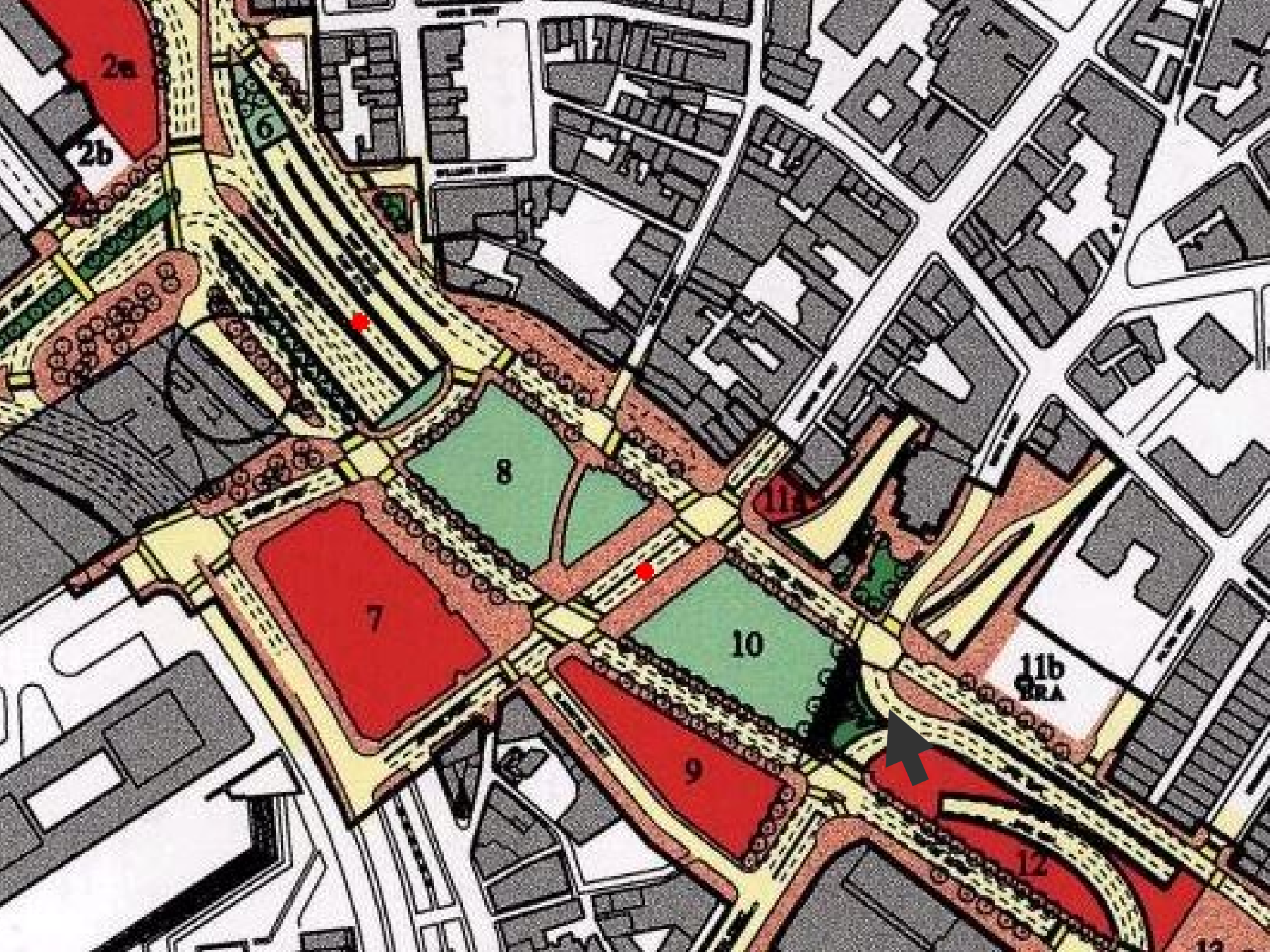
3D models

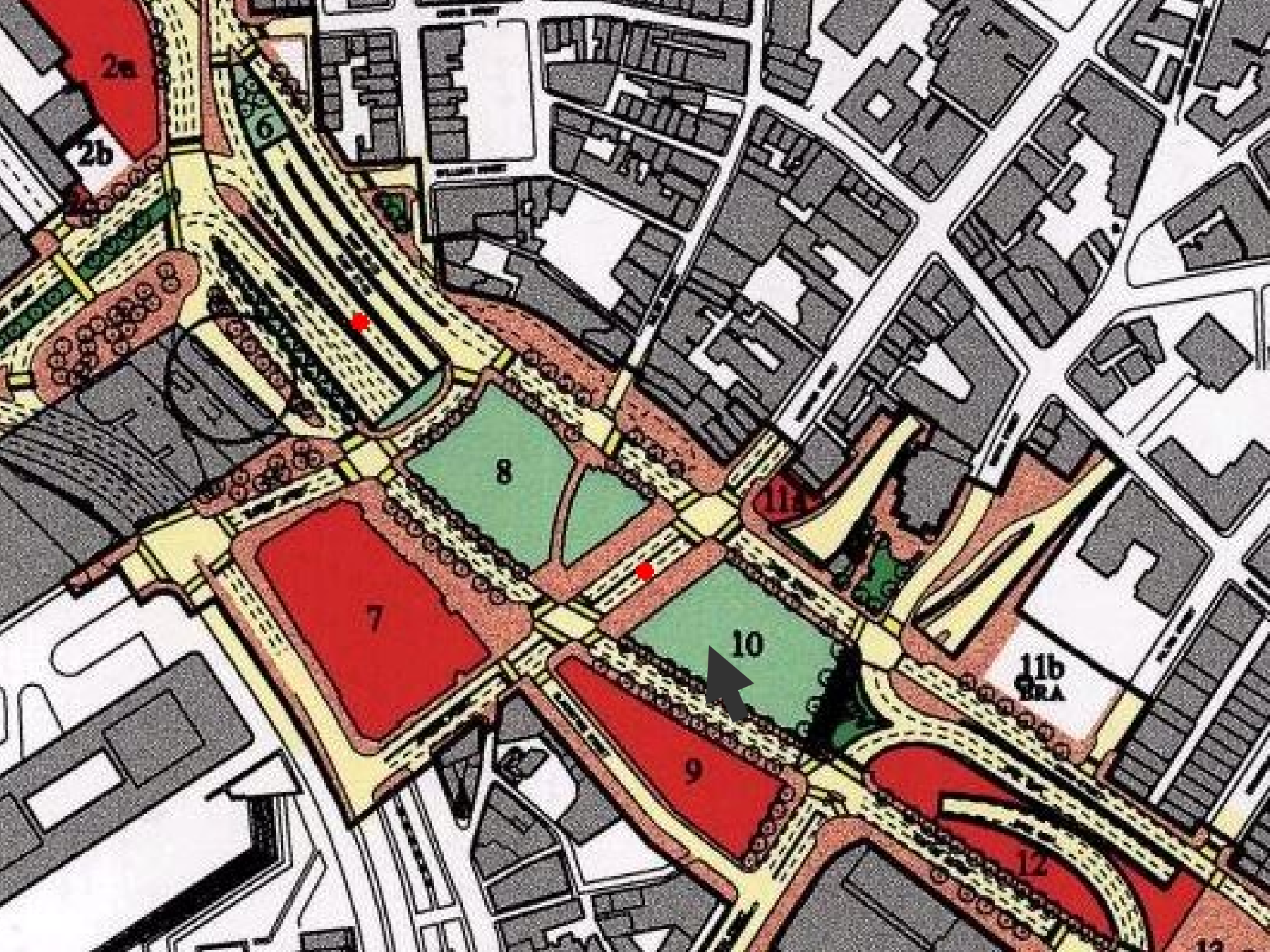
Renderings

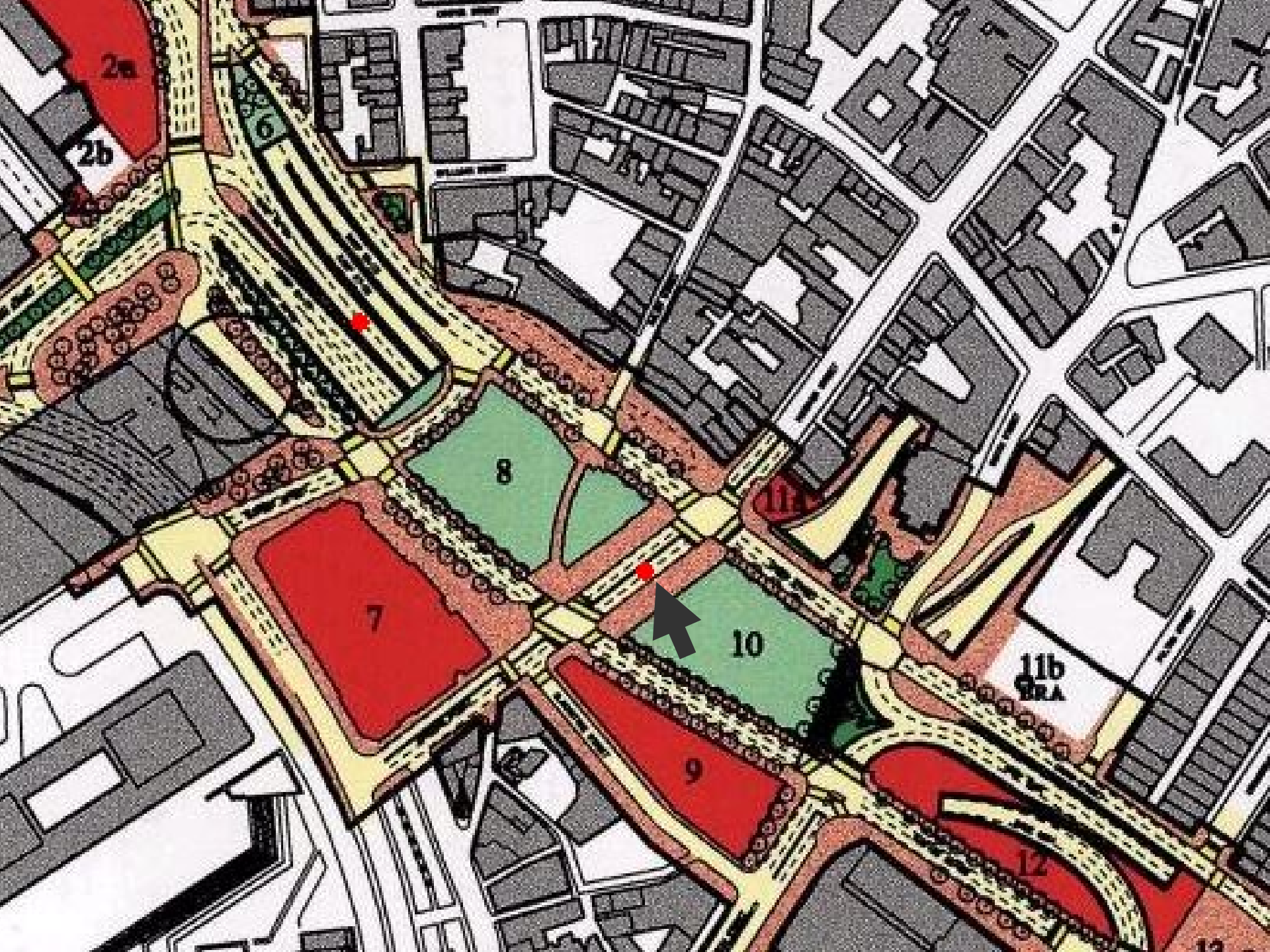
Quicktime VR

Any kind of file


2a
2b
6
8
7
10
11b
9


2a
2b
6
8
7
10
11b
9
12

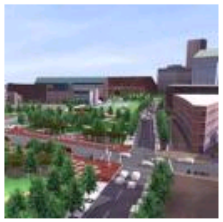

2a
2b
6
8
7
10
11b
9


2a
2b
6
8
7
10
11b
9

Parcels 8 and 10

CAMERA 201S

SouthBound Current



SouthBound Future

CAMERA 202S

Street Level Current

Street Level Future

CAMERA 204P

Future - Winter

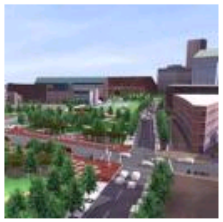
Existing

Future - Summer

Parcels 8 and 10

CAMERA 201S

SouthBound Current



SouthBound Future

CAMERA 202S

Street Level Current

Street Level Future

CAMERA 204P

Future - Winter

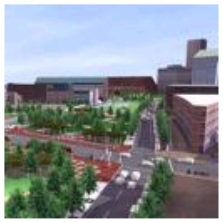
Existing

Future - Summer

Parcels 8 and 10

CAMERA 201S

SouthBound Current



SouthBound Future

CAMERA 202S

Street Level Current

Street Level Future

CAMERA 204P

Future - Winter

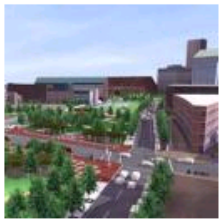
Existing

Future - Summer

Parcels 8 and 10

CAMERA 201S

SouthBound Current



SouthBound Future

CAMERA 202S

Street Level Current

Street Level Future

CAMERA 204P

Future - Winter

Existing

Future - Summer

Parcels 8 and 10

CAMERA 201S

SouthBound Current

SouthBound Future

CAMERA 202S

Street Level Current

Street Level Future

CAMERA 204P

Future - Winter

Existing

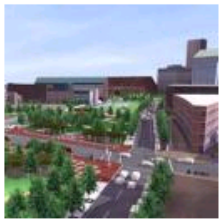
Future - Summer

To Understand
we need to
Compare

Parcels 8 and 10

CAMERA 201S

SouthBound Current



SouthBound Future

CAMERA 202S

Street Level Current

Street Level Future

CAMERA 204P

Future - Winter

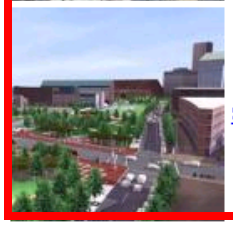
Existing

Future - Summer

Parcels 8 and 10

CAMERA 201S

SouthBound Current



SouthBound Future

CAMERA 202S

Street Level Current

Street Level Future

CAMERA 204P

Future - Winter

Existing

Future - Summer

Files for Parcels 8 and 10 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media History Mail

Address http://www.mapjunction.com/places/Boston_BRA/fileclick.pl?dir=srcfiles/Parcels_8_and_10 Go Links

Files for Parcels 8 and 10

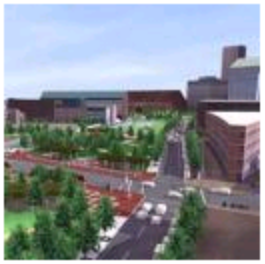
Parcels 8 and 10

Change Base Map

Compare Files

CAMERA 201S

SouthBound Current Image Metadata Bill Warner Edit



SouthBound Future Image Metadata Bill Warner Edit

Done Internet

Future - Winter

Existing

Future - Summer

Files for Parcels 8 and 10 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media History Mail

Address http://www.mapjunction.com/places/Boston_BRA/fileclick.pl?dir=srcfiles/Parcels_8_and_10 Go Links

Files for Parcels 8 and 10

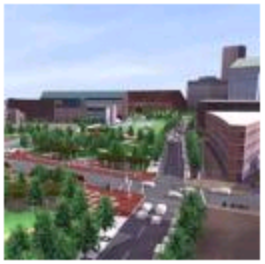
Parcels 8 and 10

Change Base Map

Compare Files

CAMERA 201S

SouthBound Current Image Metadata Bill Warner Edit



SouthBound Future Image Metadata Bill Warner Edit

Done Internet

Future - Winter

Existing

Future - Summer

Files for Parcels 8 and 10 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media History Mail

Address http://www.mapjunction.com/places/Boston_BRA/fileclick.pl?dir=srcfiles/Parcels_8_and_10 Go Links

Files for Parcels 8 and 10

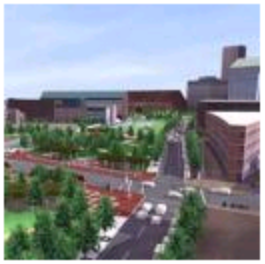
Parcels 8 and 10

Change Base Map

Compare Files

CAMERA 201S

SouthBound Current Image Metadata Bill Warner Edit



SouthBound Future Image Metadata Bill Warner Edit

Done Internet

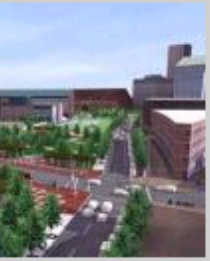
Future - Winter

Existing

Future - Summer

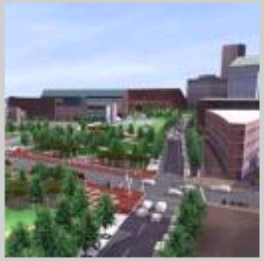
http://www.mapjunction.com/places/Boston_BRA/filecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015

Go Links



SouthBound Current

SouthBound Future



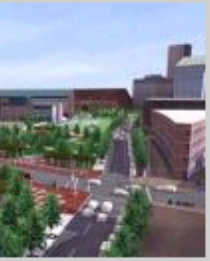
File Name: SouthBound Current

Toggle Image

Internet

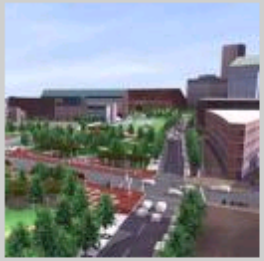
http://www.mapjunction.com/places/Boston_BRA/filecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015

Go Links



SouthBound Current

SouthBound Future



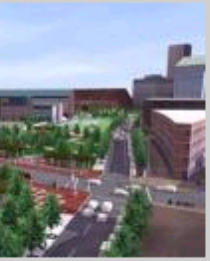
File Name: SouthBound Current

Toggle Image

Internet

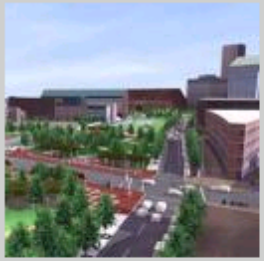
http://www.mapjunction.com/places/Boston_BRA/filecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015

Go Links



SouthBound Current

SouthBound Future



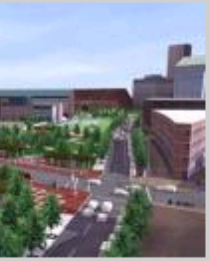
File Name: SouthBound Current

Toggle Image

Internet

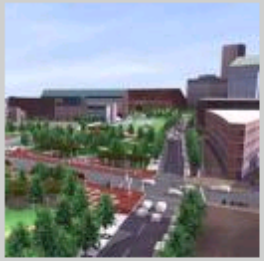
http://www.mapjunction.com/places/Boston_BRA/filecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015

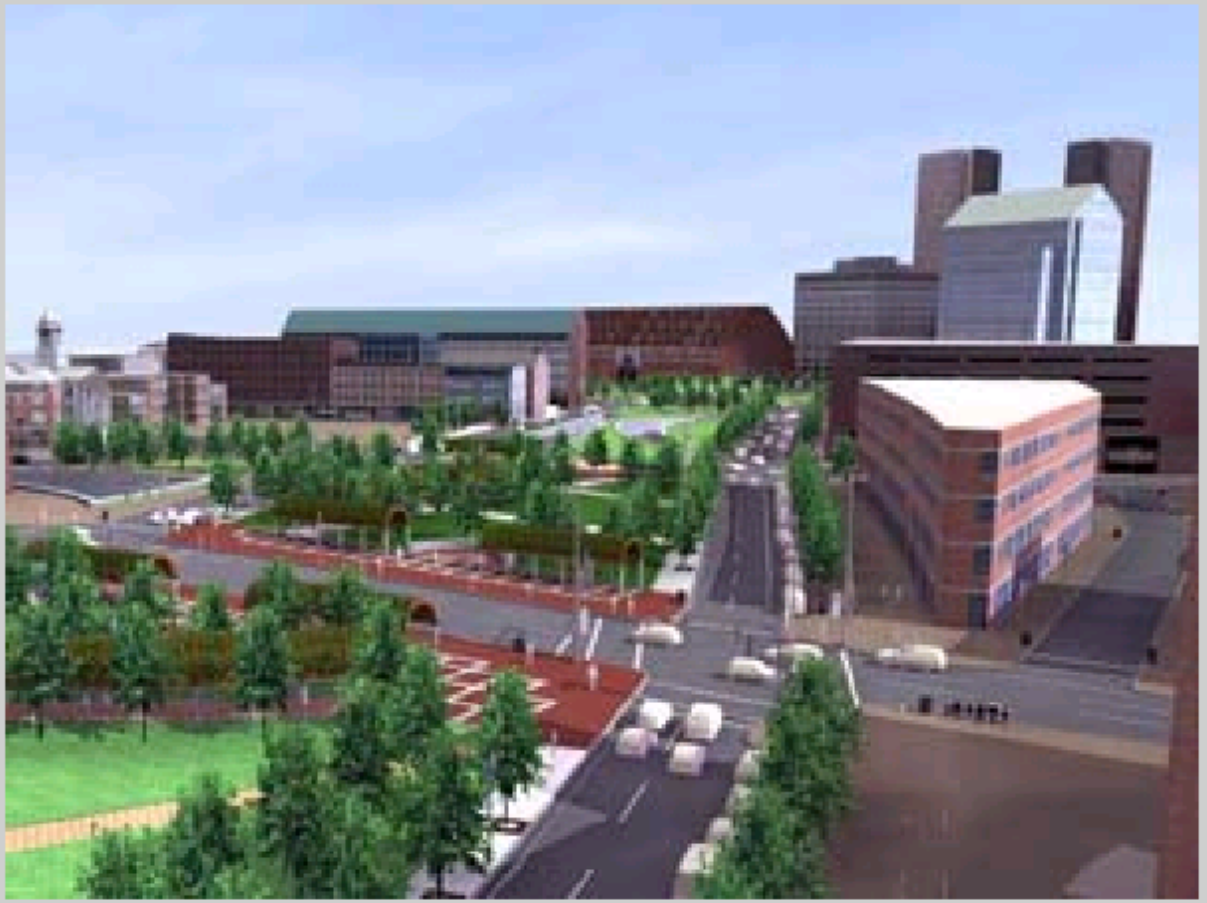
Go Links



SouthBound Current

SouthBound Future





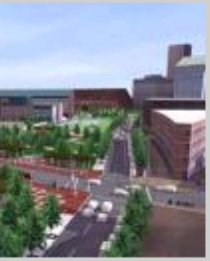
File Name: SouthBound Future

Toggle Image

Internet

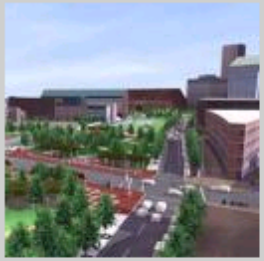
http://www.mapjunction.com/places/Boston_BRA/filecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015

Go Links



SouthBound Current

SouthBound Future



File Name: SouthBound Current

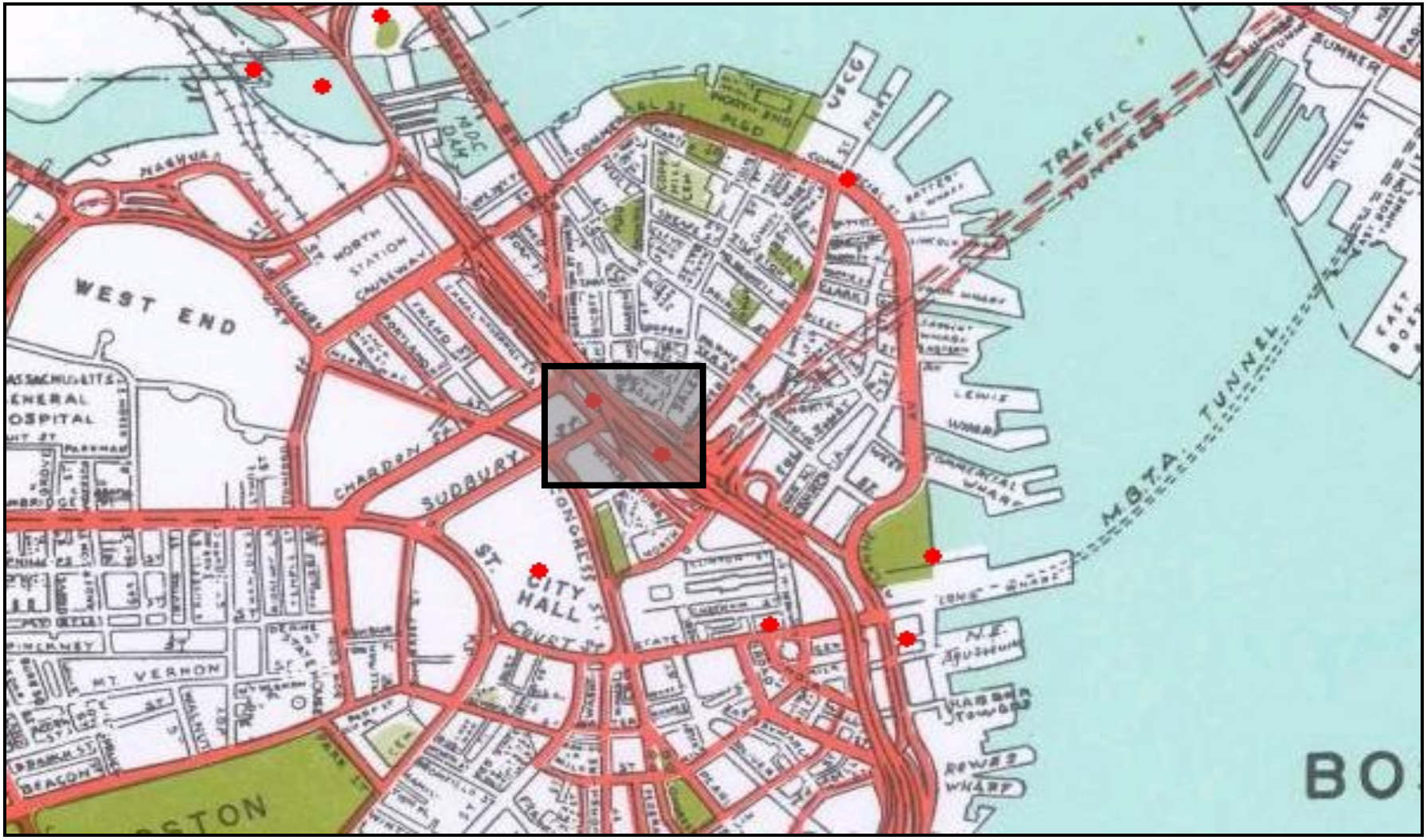
Toggle Image

Internet

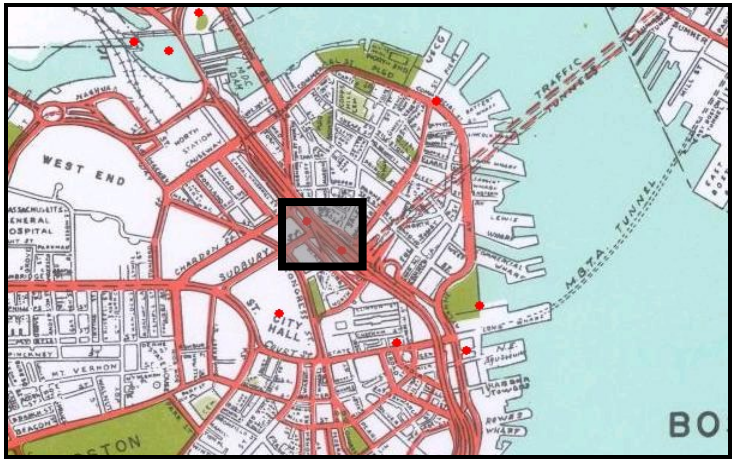
To Understand
we need
Location

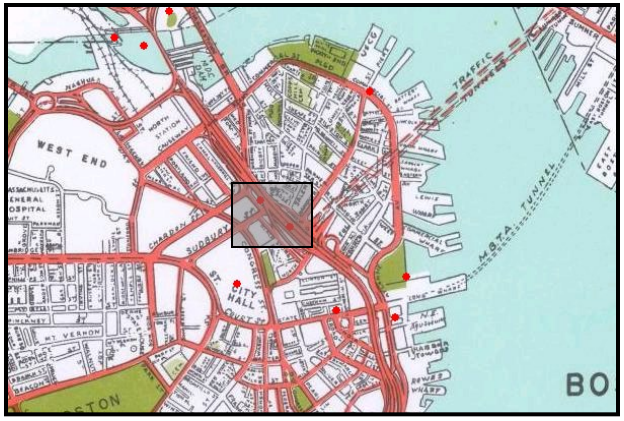
WEST END
NORTH STATION
CHARLES ST
SUDBURY
CONCORD
ST.
CITY HALL
COURT ST
MT VERNON
BEACON
TRAFFIC
M.B.T.A.
TUNNEL
N.E. AQUARIUM
HARBOR TOWERS
BOWDOIN WHARF
LEWIS WHARF
MASS. GENERAL HOSPITAL
MASSACHUSETTS
CAMBRIDGE

WEST END
NORTH STATION
CAUSEWAY
CHARDON ST
SUDBURY
ST.
CITY HALL
COURT ST
MT VERNON
BEACON ST
TRAFFIC
MBTA TUNNEL
N.E. AQUARIUM
HARBOR TOWERS
BOWDOIN WHARF
LEWIS WHARF
MASSACHUSETTS GENERAL HOSPITAL
USCG


WEST END
NORTH STATION
CAUSEWAY
CHARDON ST
SUDBURY
ST.
CITY HALL
COURT ST
STATE
MT VERNON
BEACON
TRAFFIC
TUNNEL
M.B.T.A. TUNNEL
COMMERCIAL WHARF
LONG WHARF
BOSTON

WEST END
NORTH STATION CAUSEWAY
CHARDON ST
SUDBURY
ST
CITY HALL
COURT PL
MT VERHON
BEACON ST
TRAFFIC TUNNEL
M.B.T.A. TUNNEL
LONG WHARF
BO


WEST END
CHARLES ST
SUDBURY
CITY HALL
COURT ST
MT VERNON
TRAFFIC TUNNEL
M.B.T.A. TUNNEL
BO


WEST END
NORTH STATION
CHARLES ST.
SUDBURY
ST
CITY HALL
COURT
MT VERNON
TRAFFIC
TUNNEL
MBTA
TUNNEL
BO

WEST END
MASSACHUSETTS GENERAL HOSPITAL
NORTH STATION
CHARLES RIVER
STORROW DR.
CITY HALL
MT. VERNON
TRAFFIC
MBTA TUNNEL
BO

filecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015

File Name: SouthBound Current

Toggle Image

Internet

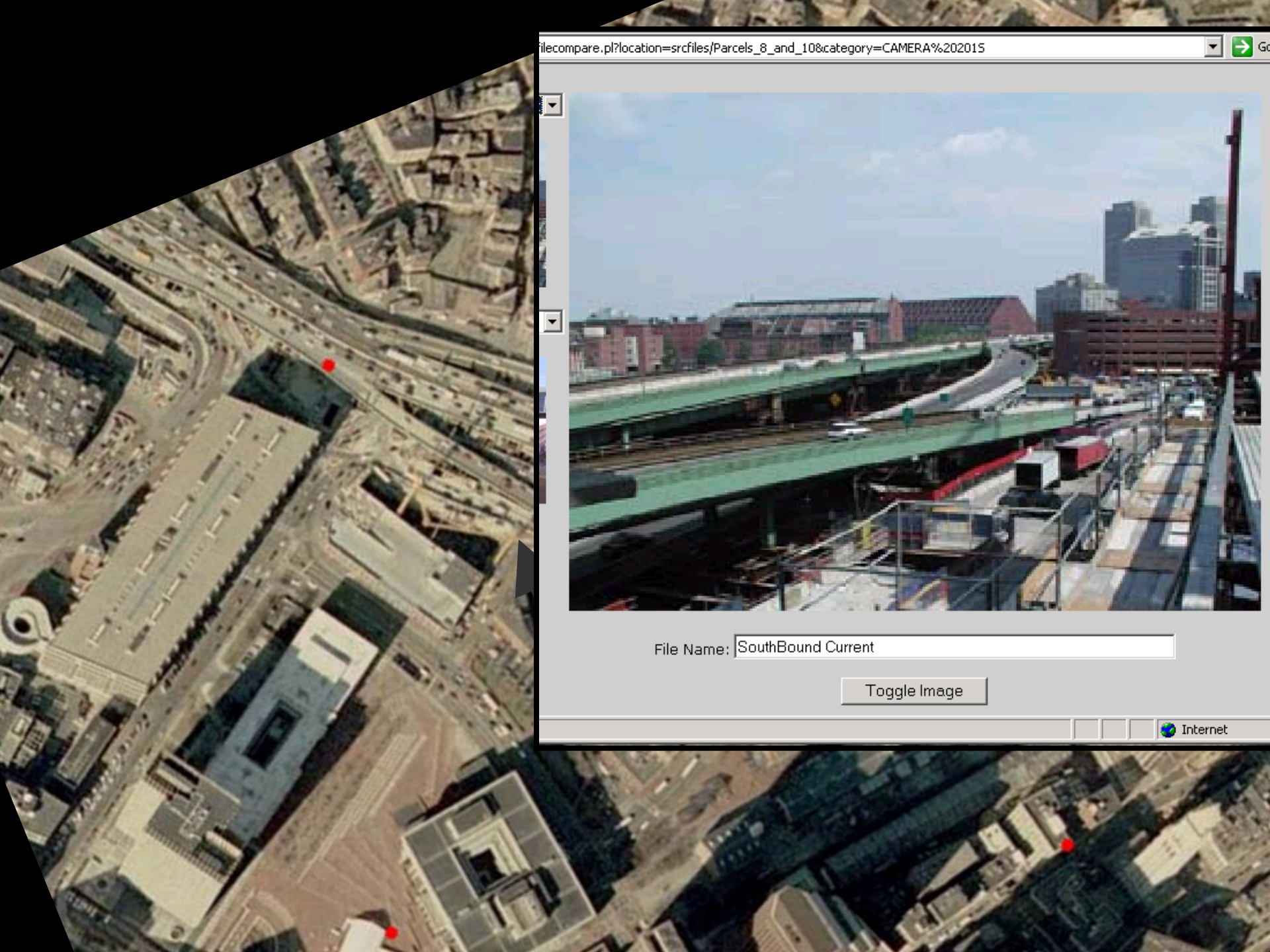
filecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015

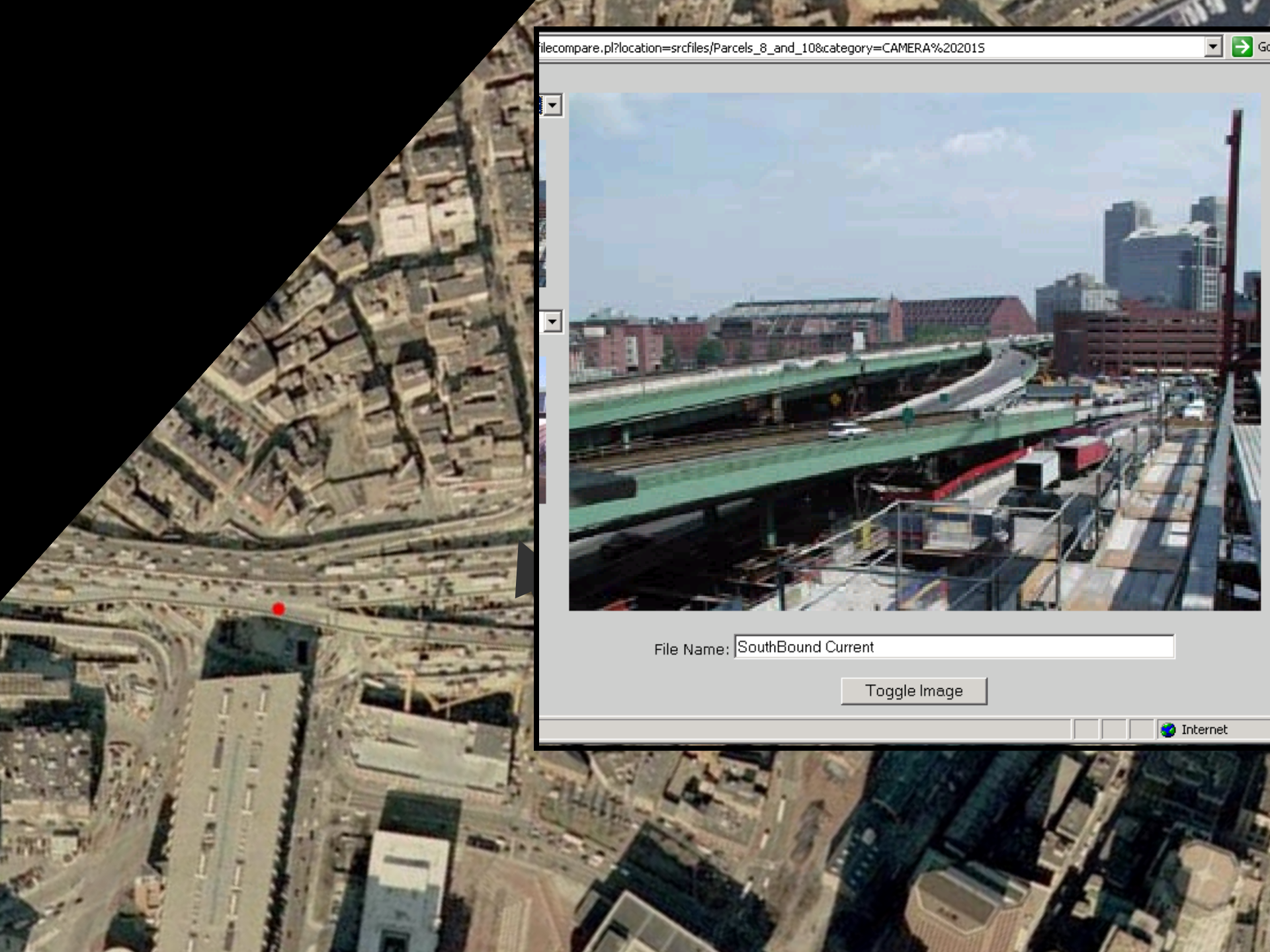
File Name: SouthBound Current

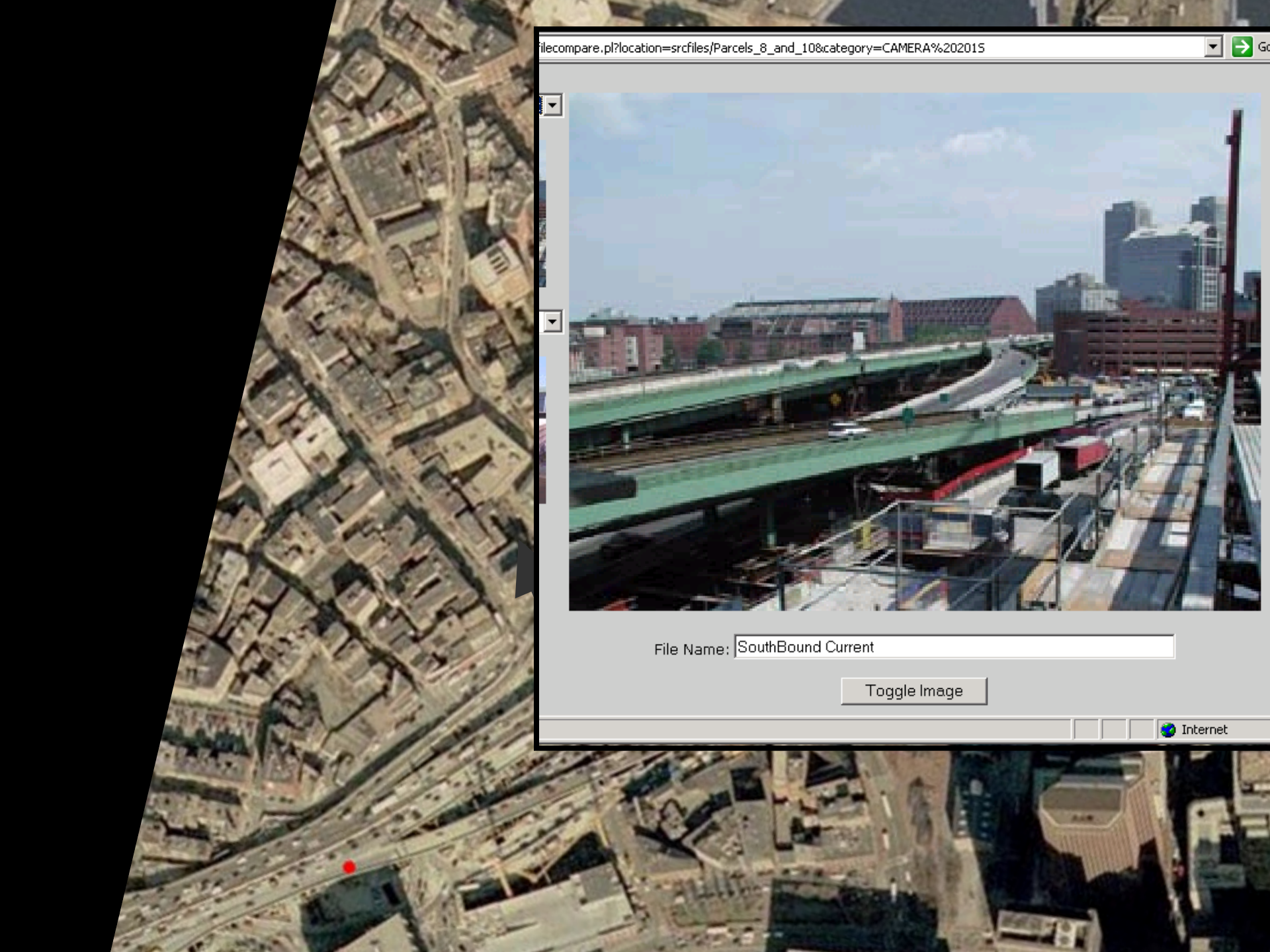
Toggle Image

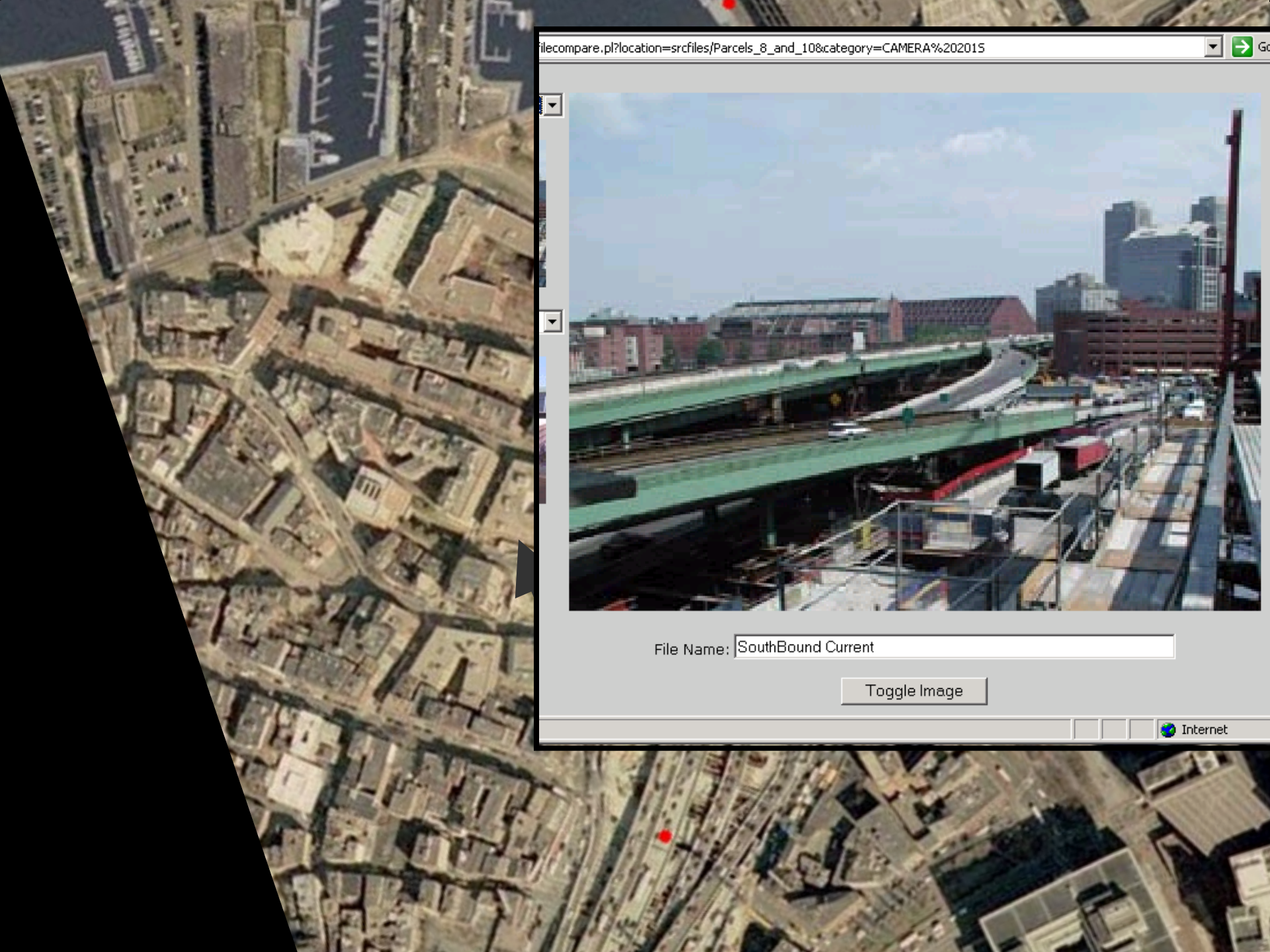
Internet

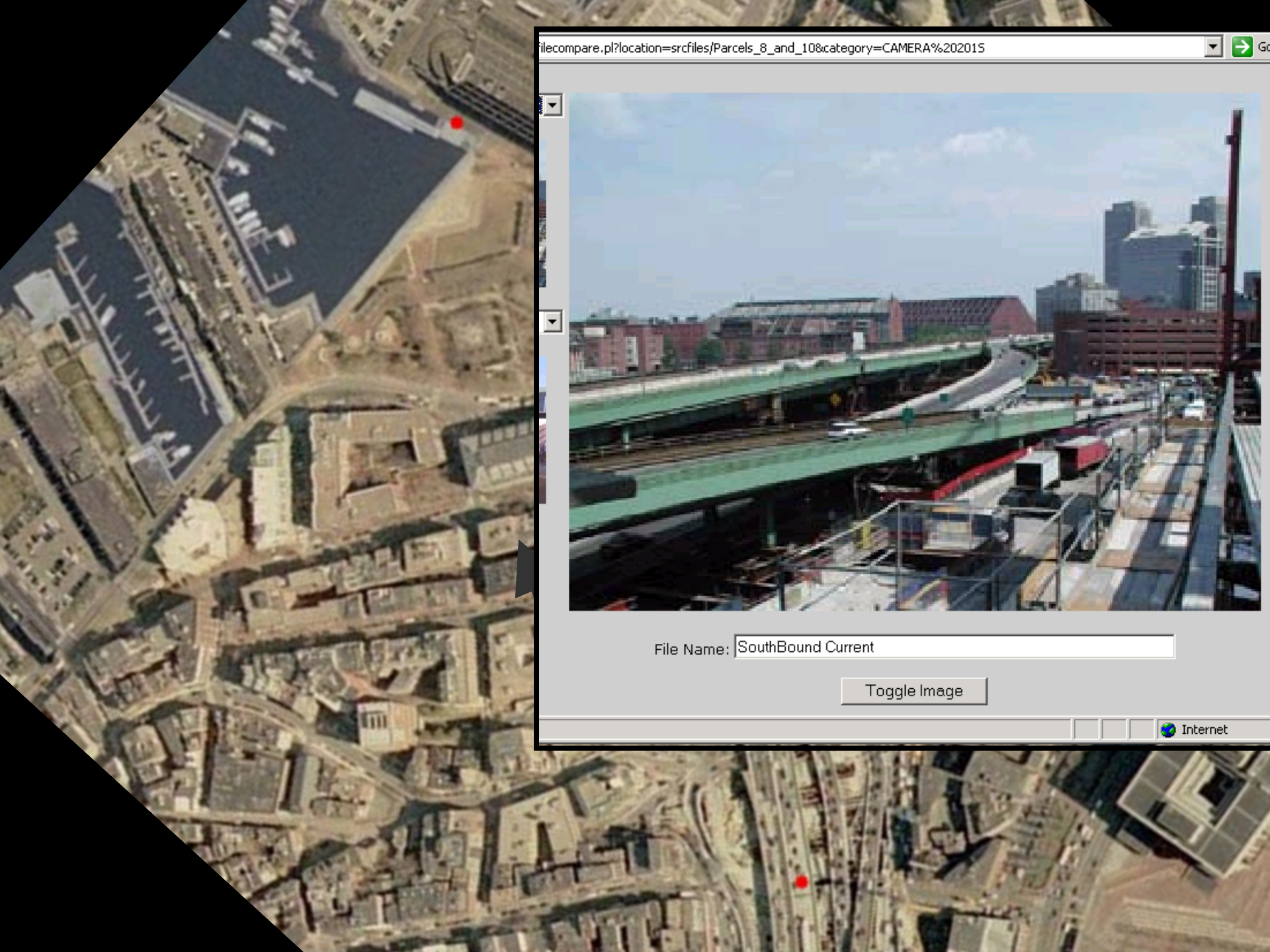
filecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015
File Name: SouthBound Current
Toggle Image
Internet

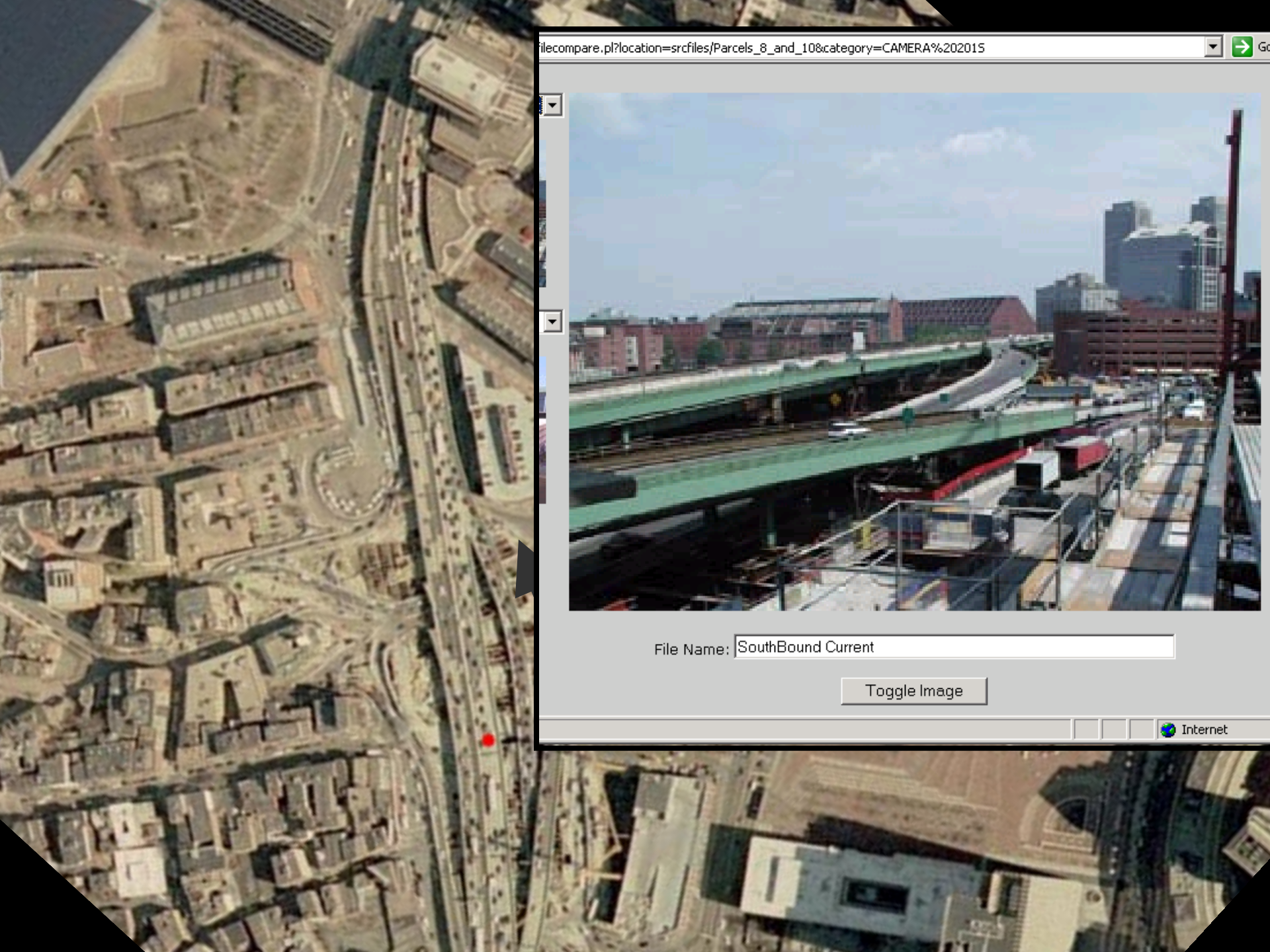

filecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015
File Name: SouthBound Current
Toggle Image
Internet

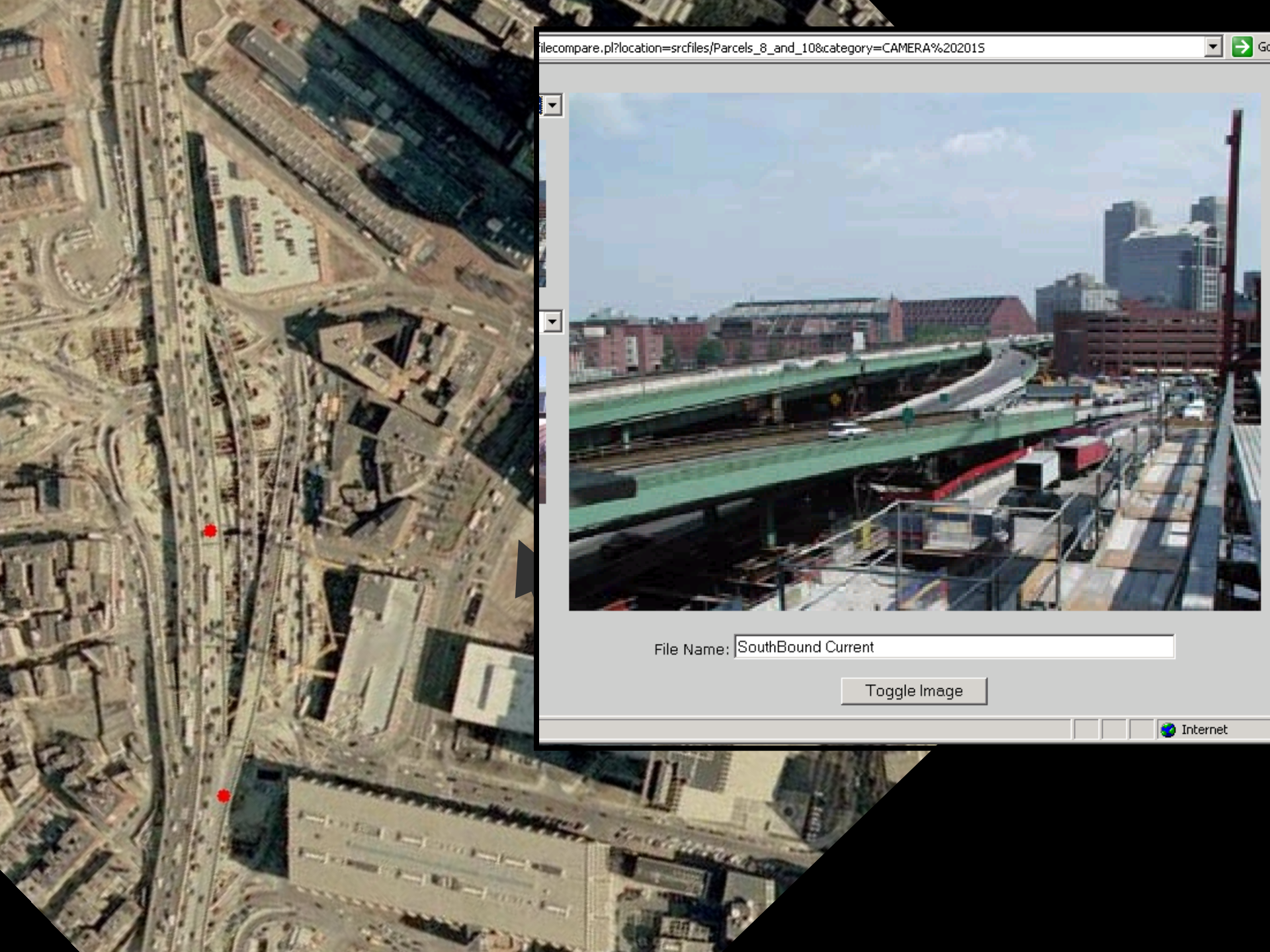

ilecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015
File Name: SouthBound Current
Toggle Image
Internet


filecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015
File Name: SouthBound Current
Toggle Image
Internet


filecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015
File Name: SouthBound Current
Toggle Image
Internet


filecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015
File Name: SouthBound Current
Toggle Image
Internet


filecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015
File Name: SouthBound Current
Toggle Image
Internet


ilecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015
File Name: SouthBound Current
Toggle Image
Internet

mpare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015

File Name: SouthBound Current

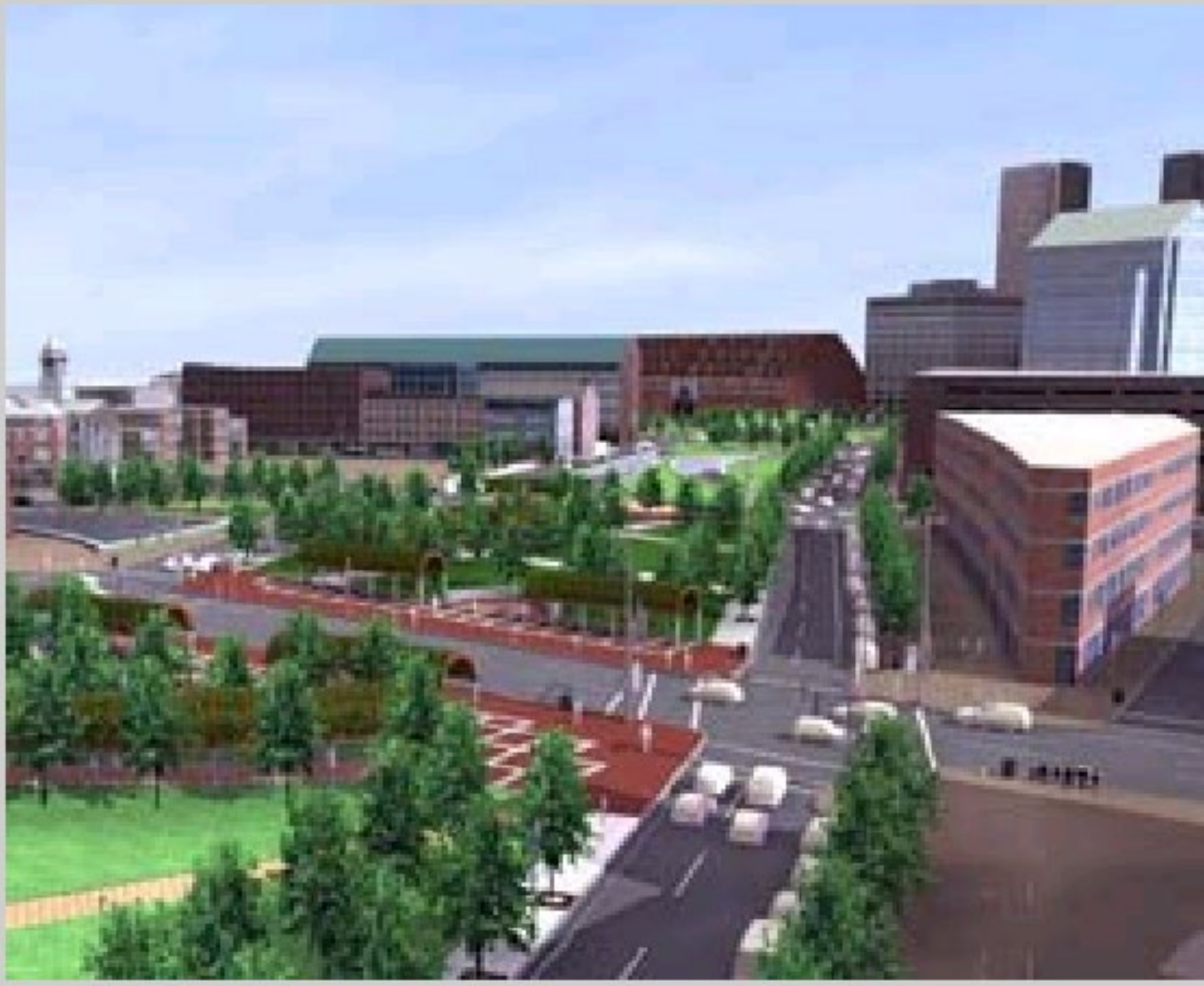
Toggle Image

mpare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015

File Name: SouthBound Current

Toggle Image

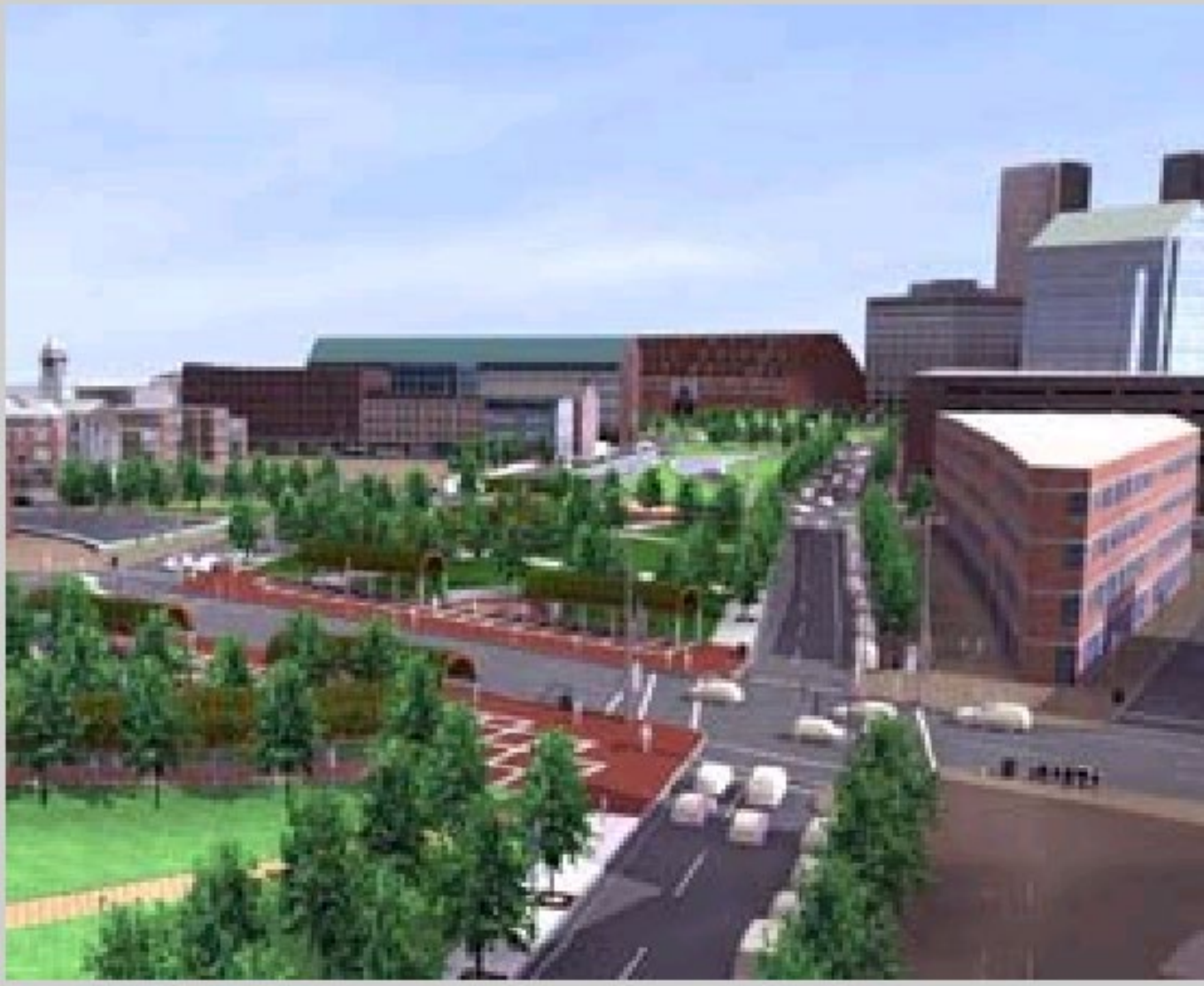
mpare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015



File Name: SouthBound Future

Toggle Image

mpare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015



File Name: SouthBound Future

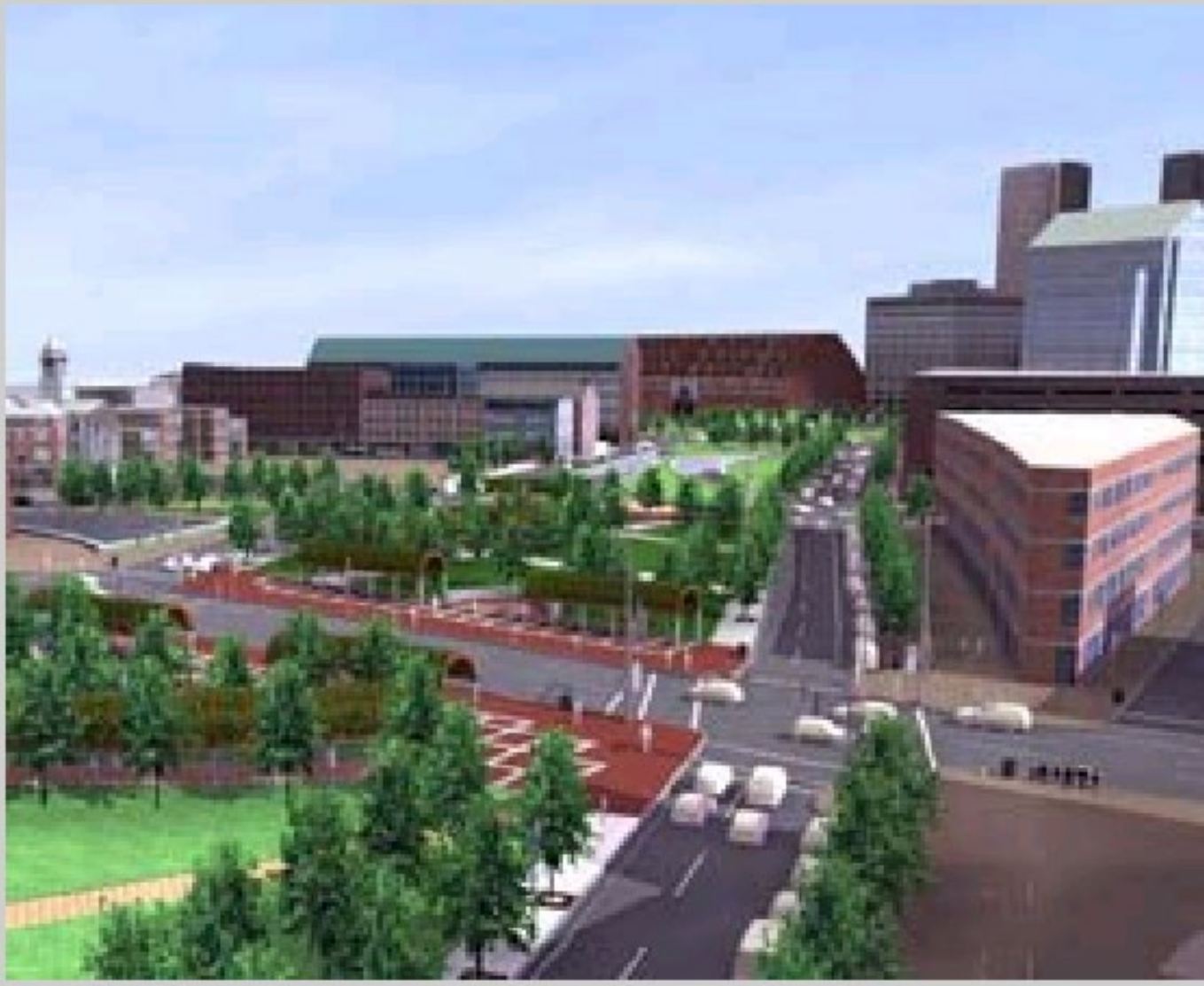
Toggle Image

mpare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015

File Name: SouthBound Current

Toggle Image

mpare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%202015

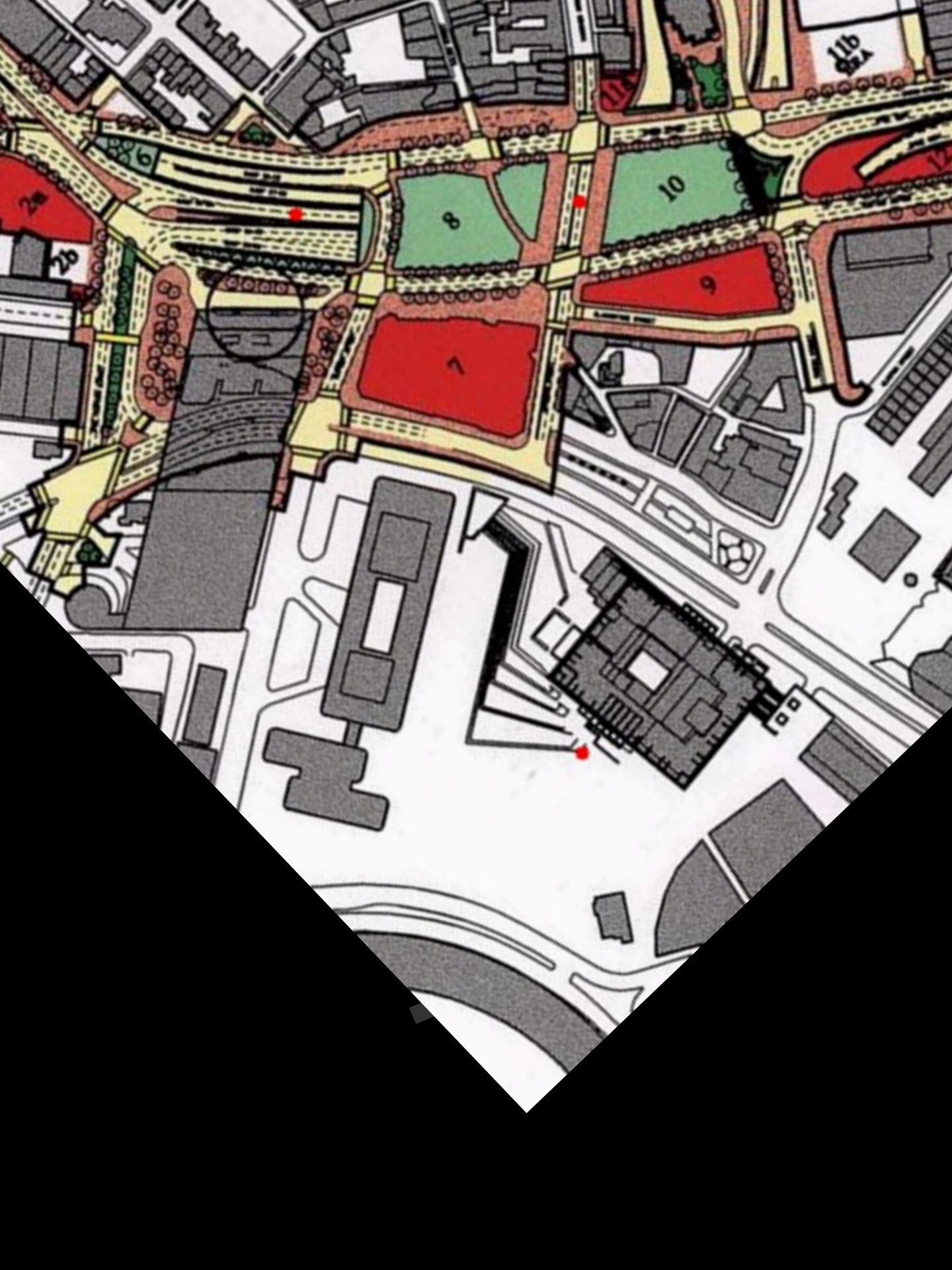


File Name: SouthBound Future

Toggle Image

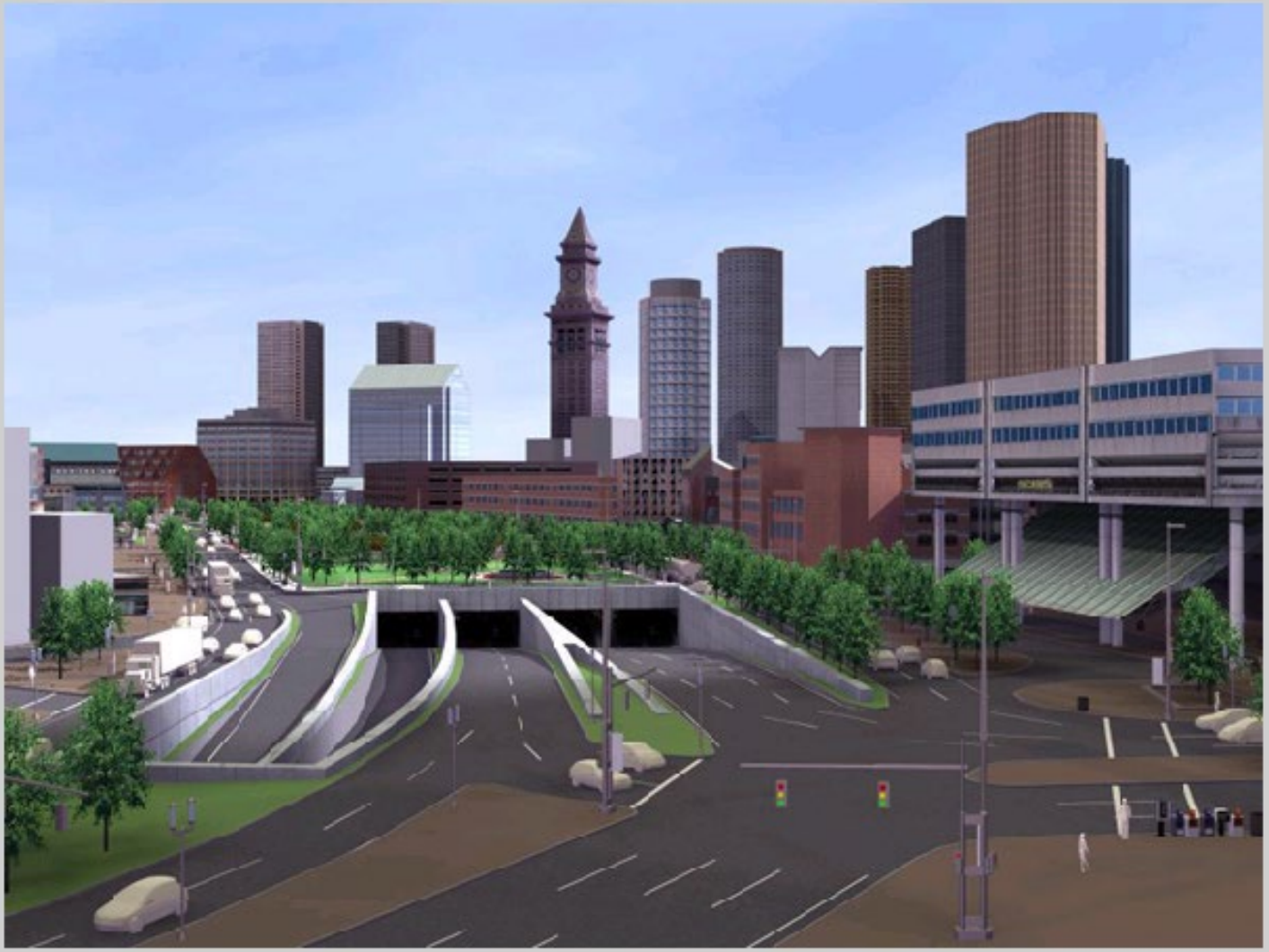
11
10
9
8
7

11
10
6
8
7


7
8
9
10

10
9
8
7
28
28

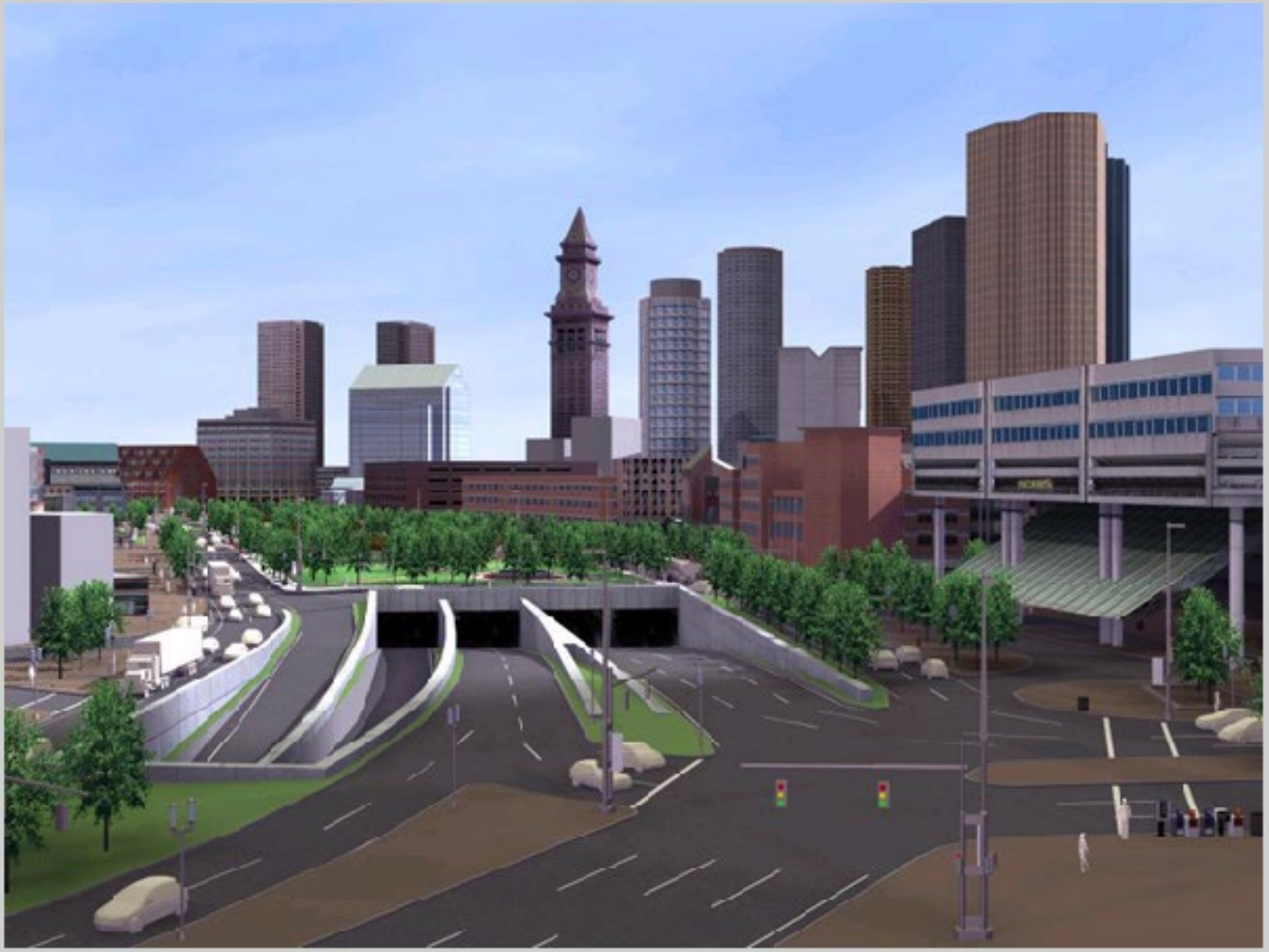
ecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%20207S



File Name: Summer

Toggle Image

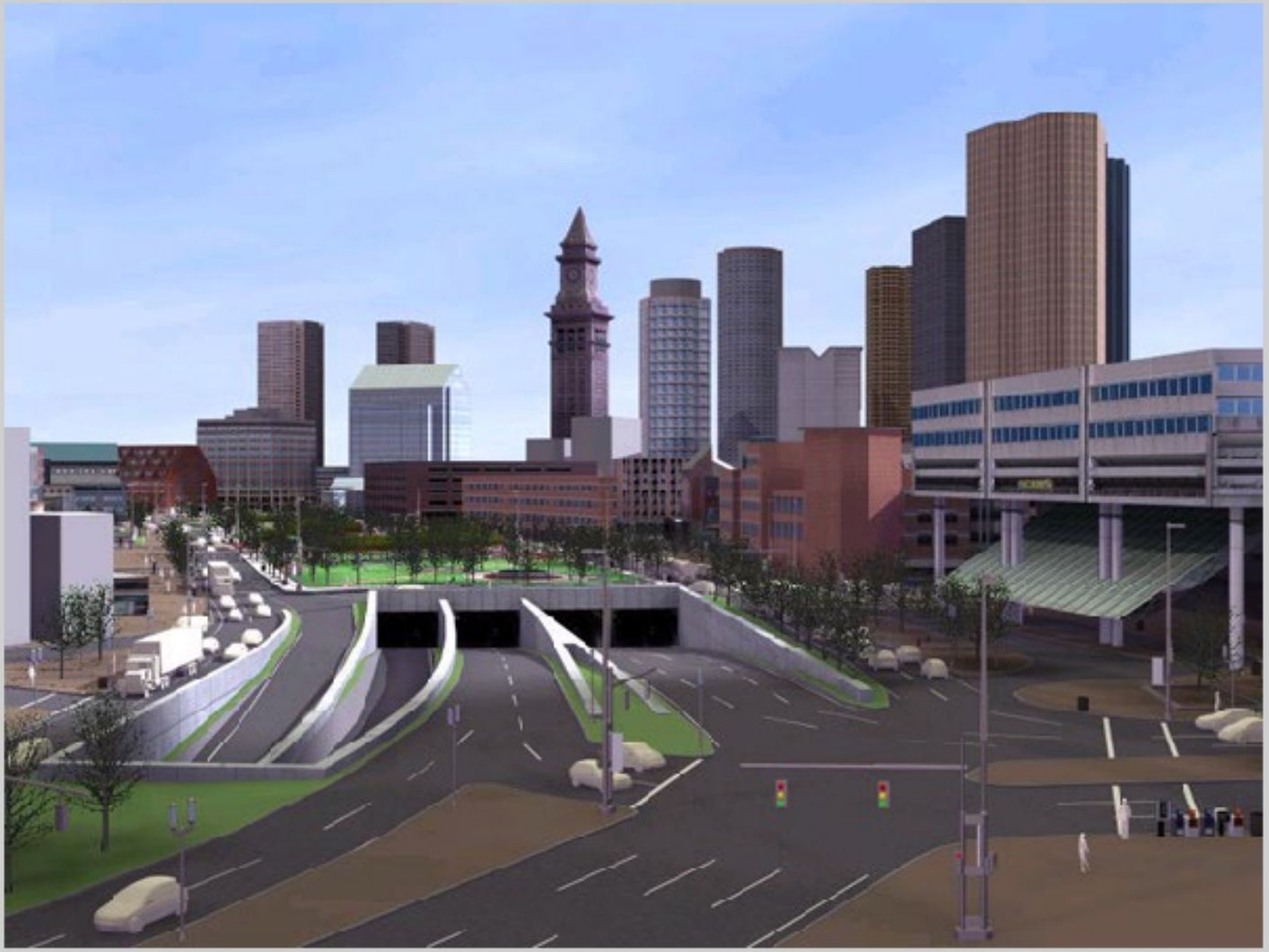
ecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%20207S



File Name: Summer

Toggle Image

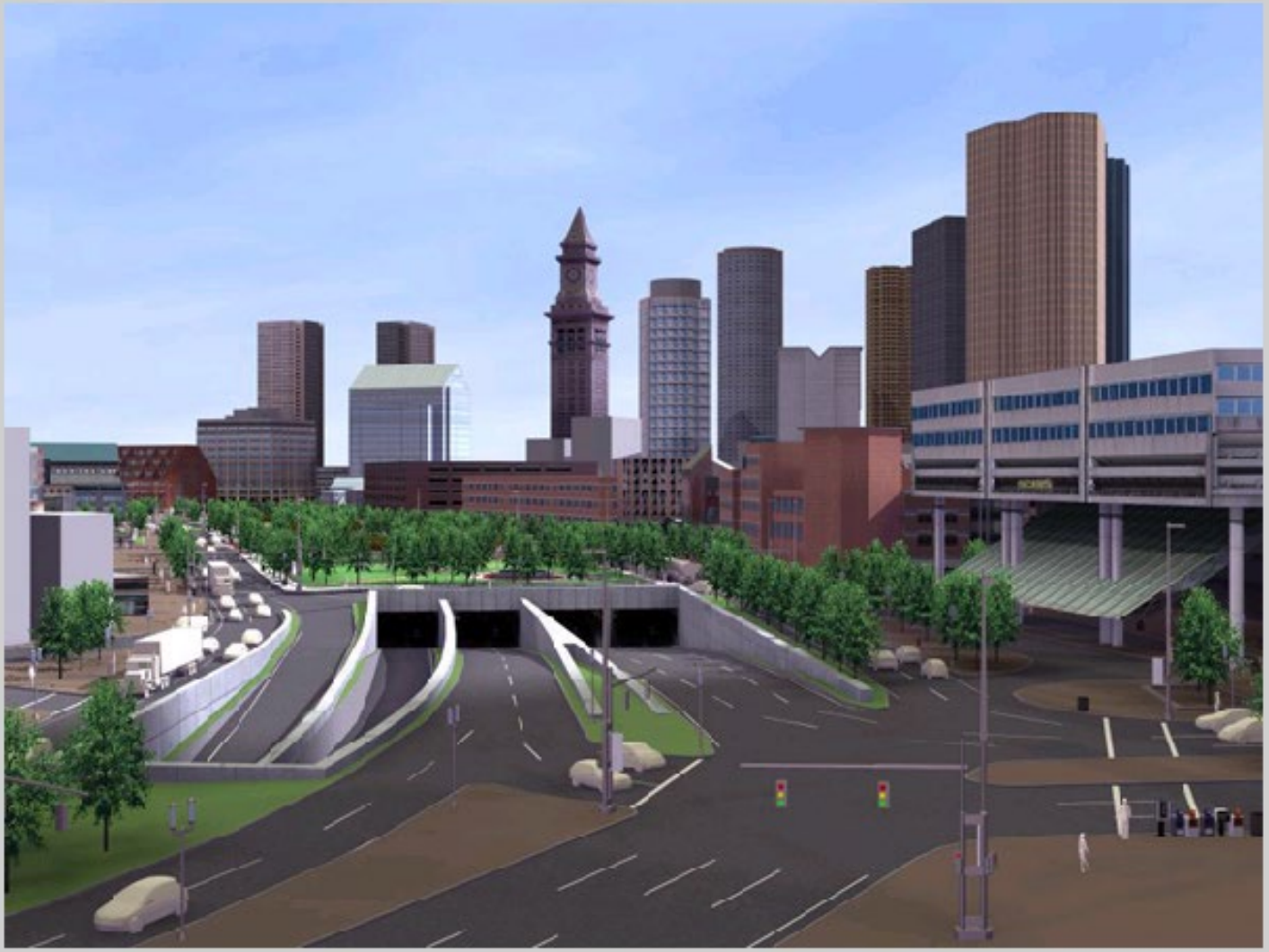
ecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%20207S



File Name: Winter

Toggle Image

ecompare.pl?location=srcfiles/Parcels_8_and_10&category=CAMERA%20207S



File Name: Summer

Toggle Image

To Understand

To Understand and Compare

To Understand and Compare at a *Location*

To Understand

and Compare

at a *Location*

requires a

To Understand

and Compare

at a *Location*

requires a

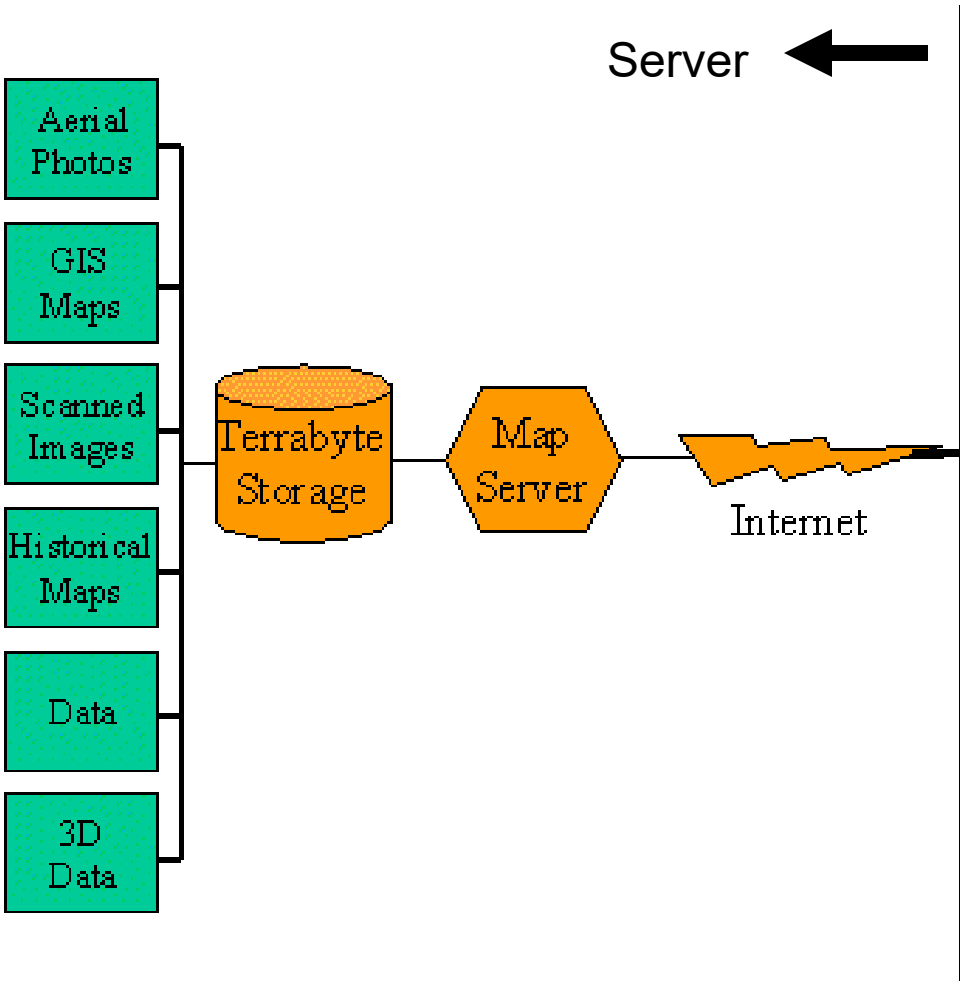
Map-Based Archive

Tools for an honest conversation

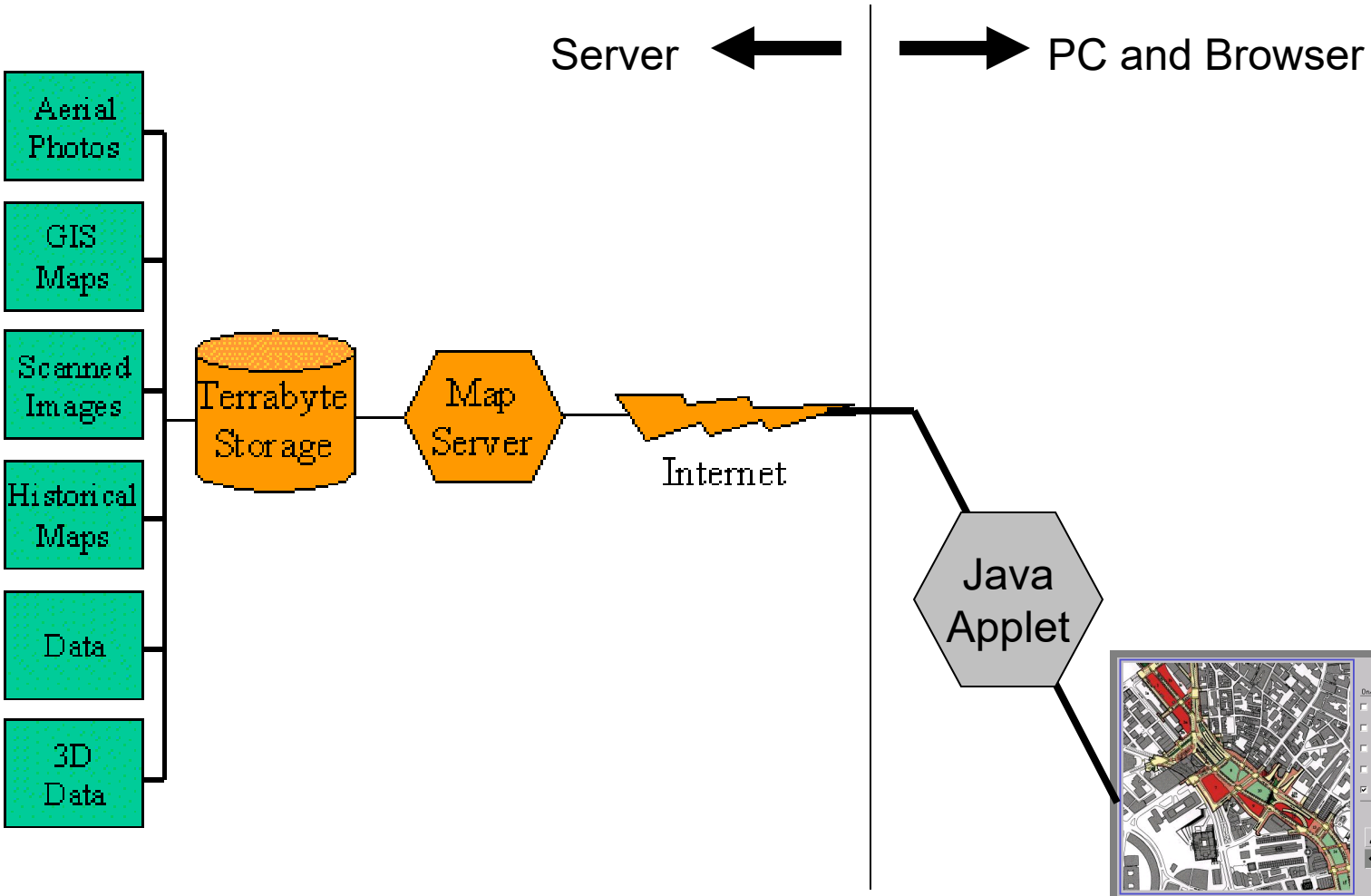
MapJunction Server Already Does Much of What We Need

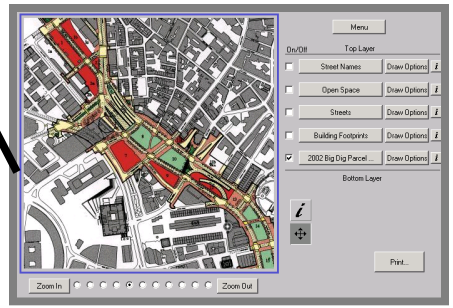
- Image Maps
- Vector Maps
- Image Transform
- Database search
- 3D terrain

MapJunction Today



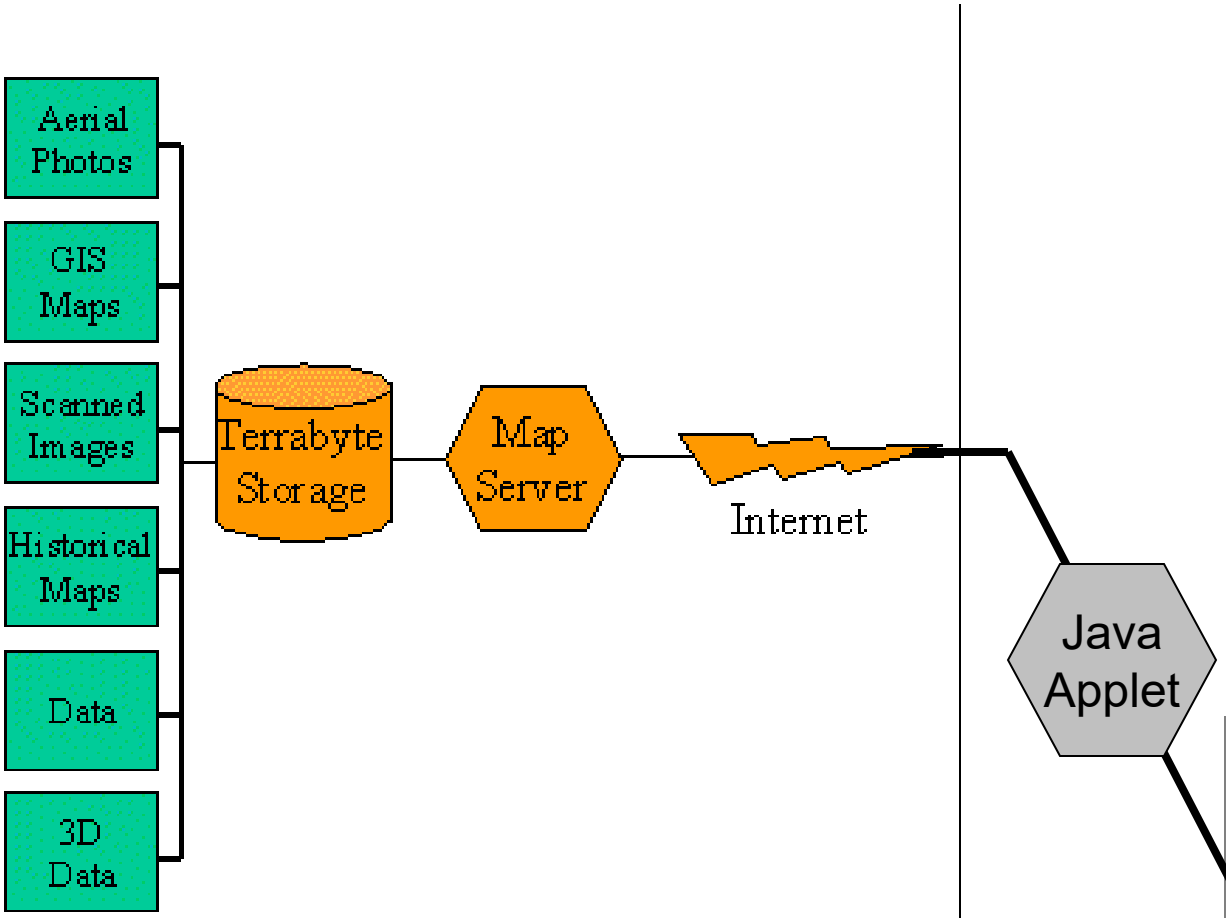
MapJunction Today

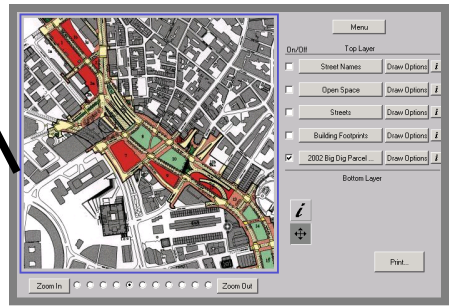




MapJunction Applet

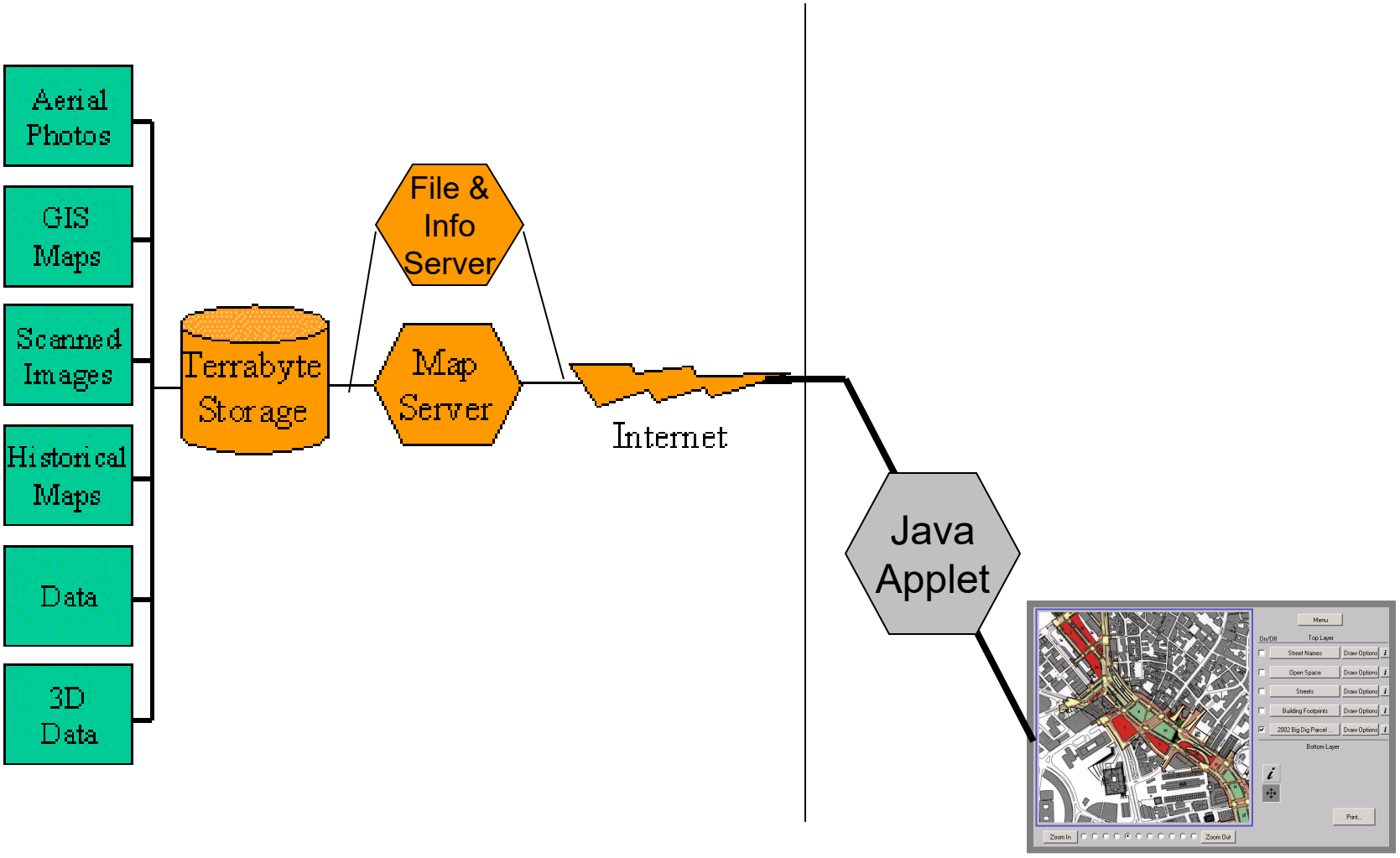
Experimental Functions





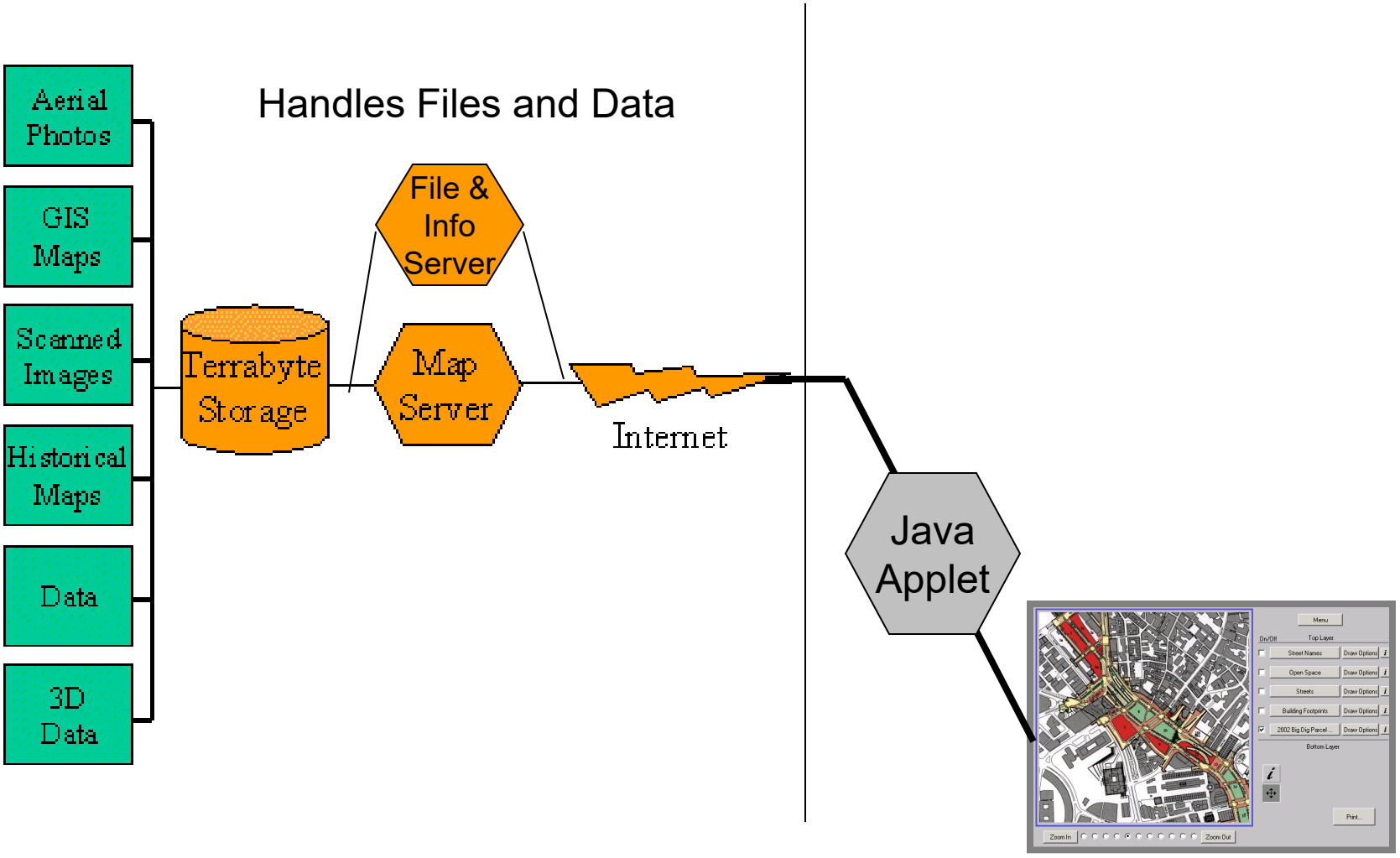
MapJunction Applet

Experimental Functions

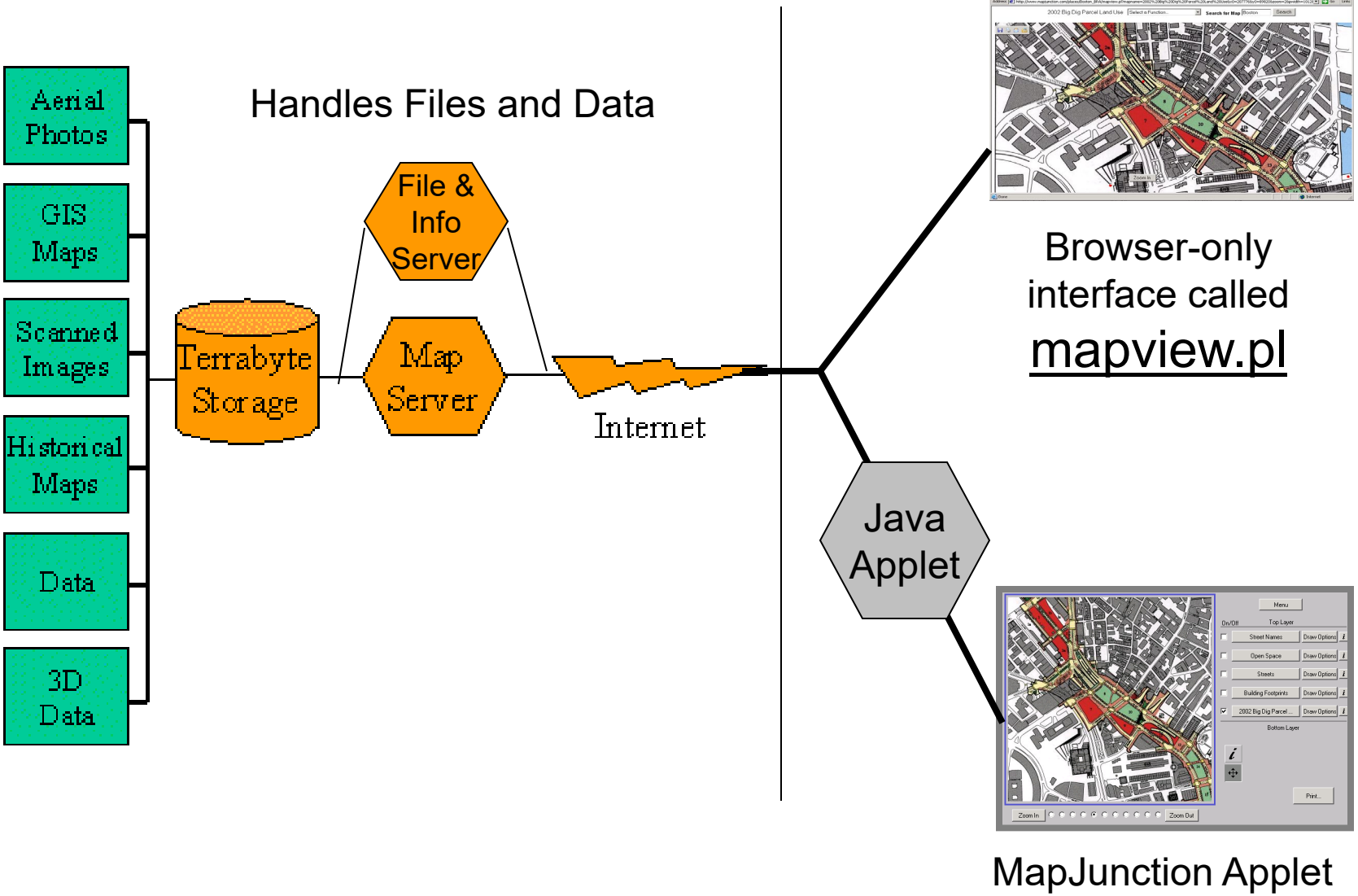


MapJunction Applet

Experimental Functions



Experimental Functions



Experimental Functions

Aerial Photos

GIS Maps

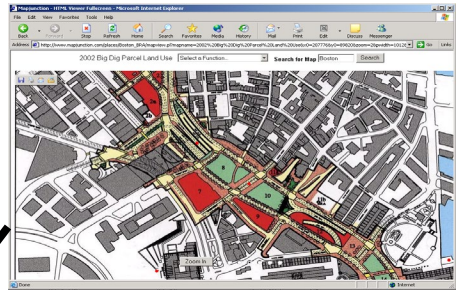
Handles Files and Data

File & Info Server

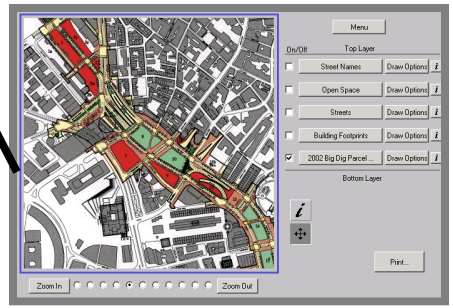
MapJunction Applet

-- Handles lots of layers
-- Highly interactive
-- Very small applet (120K)
-- Very limited graphics
-- Microsoft trying to kill Java

Java Applet



Browser-only interface called mapview.pl



MapJunction Applet

Experimental Functions

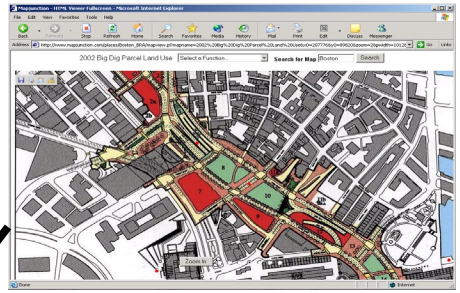
Browser-Only Mapview

-- New Archive functions
-- Great download capability
-- Test bed for idea
-- **EVEN MORE LIMITED** graphics

Data

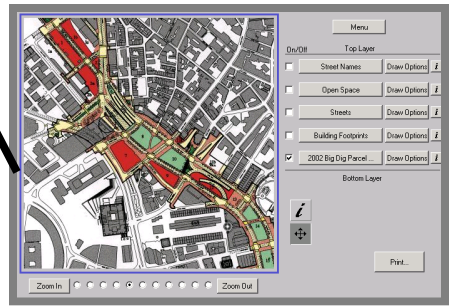
3D Data

Java Applet



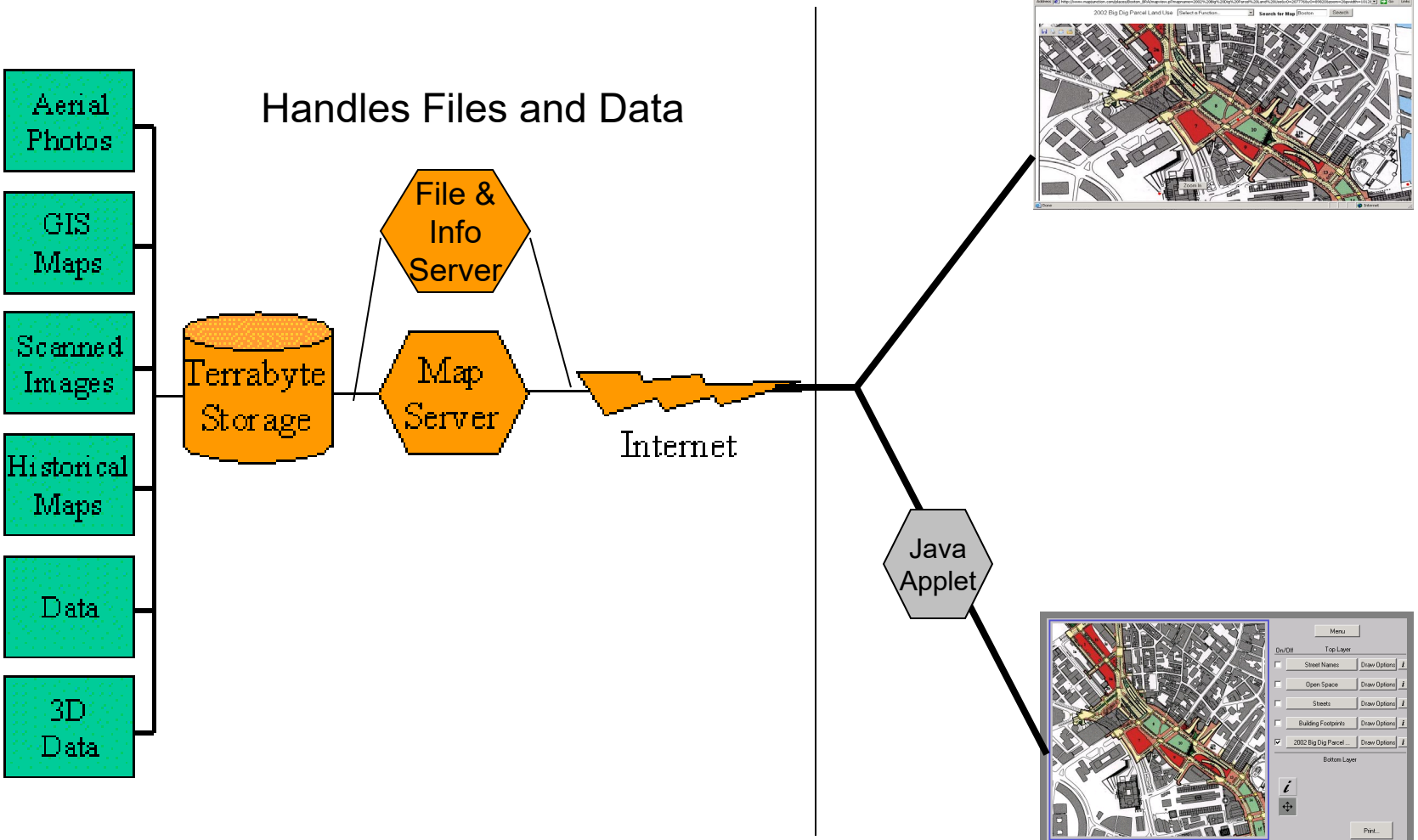
Browser-only interface called

mapview.pl



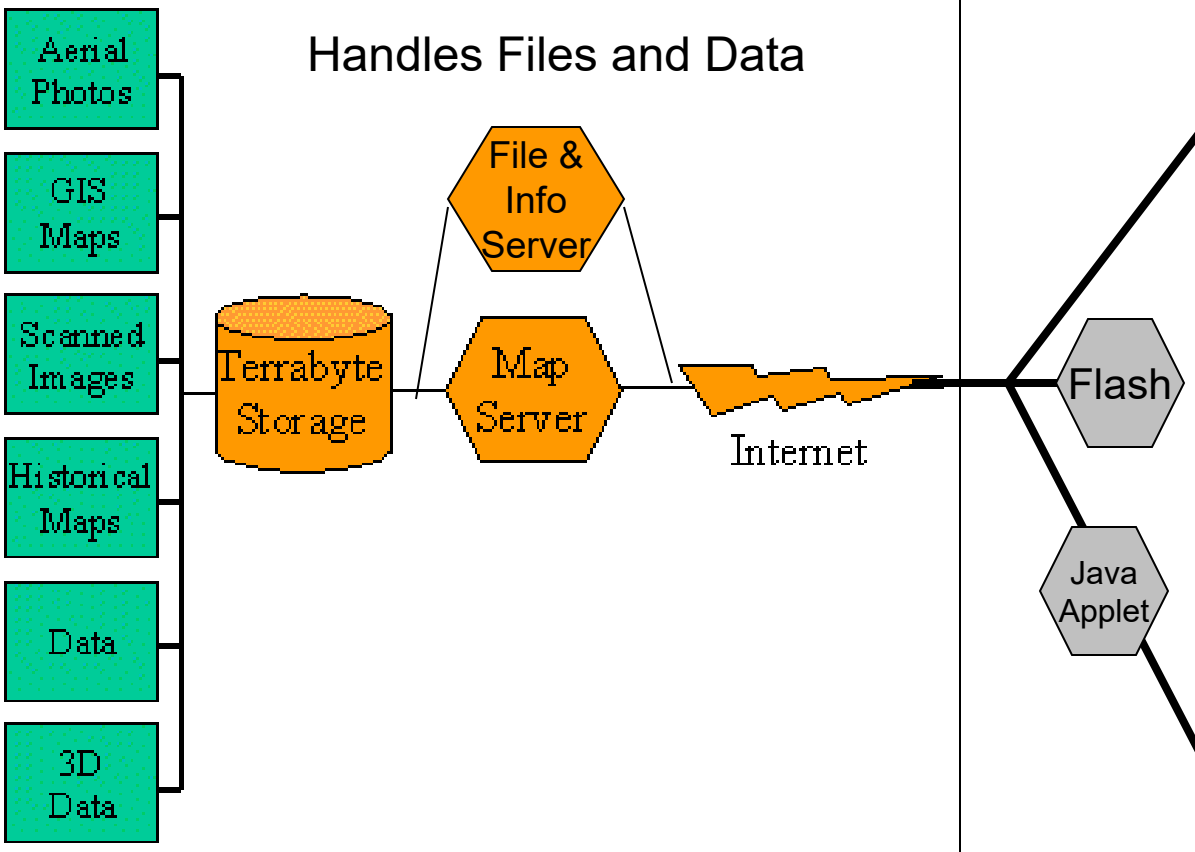
MapJunction Applet

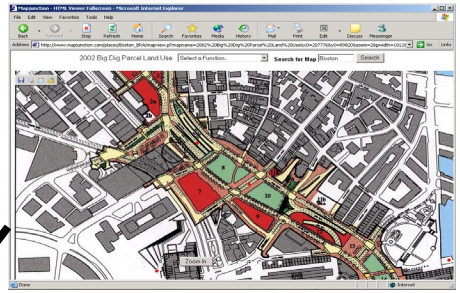
Macromedia Flash

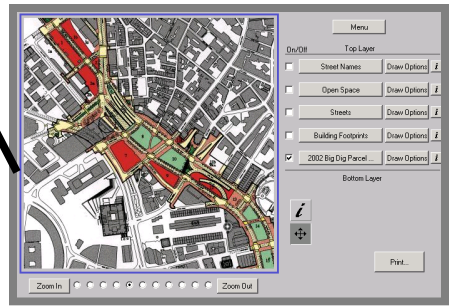


MapJunction Applet

Macromedia Flash

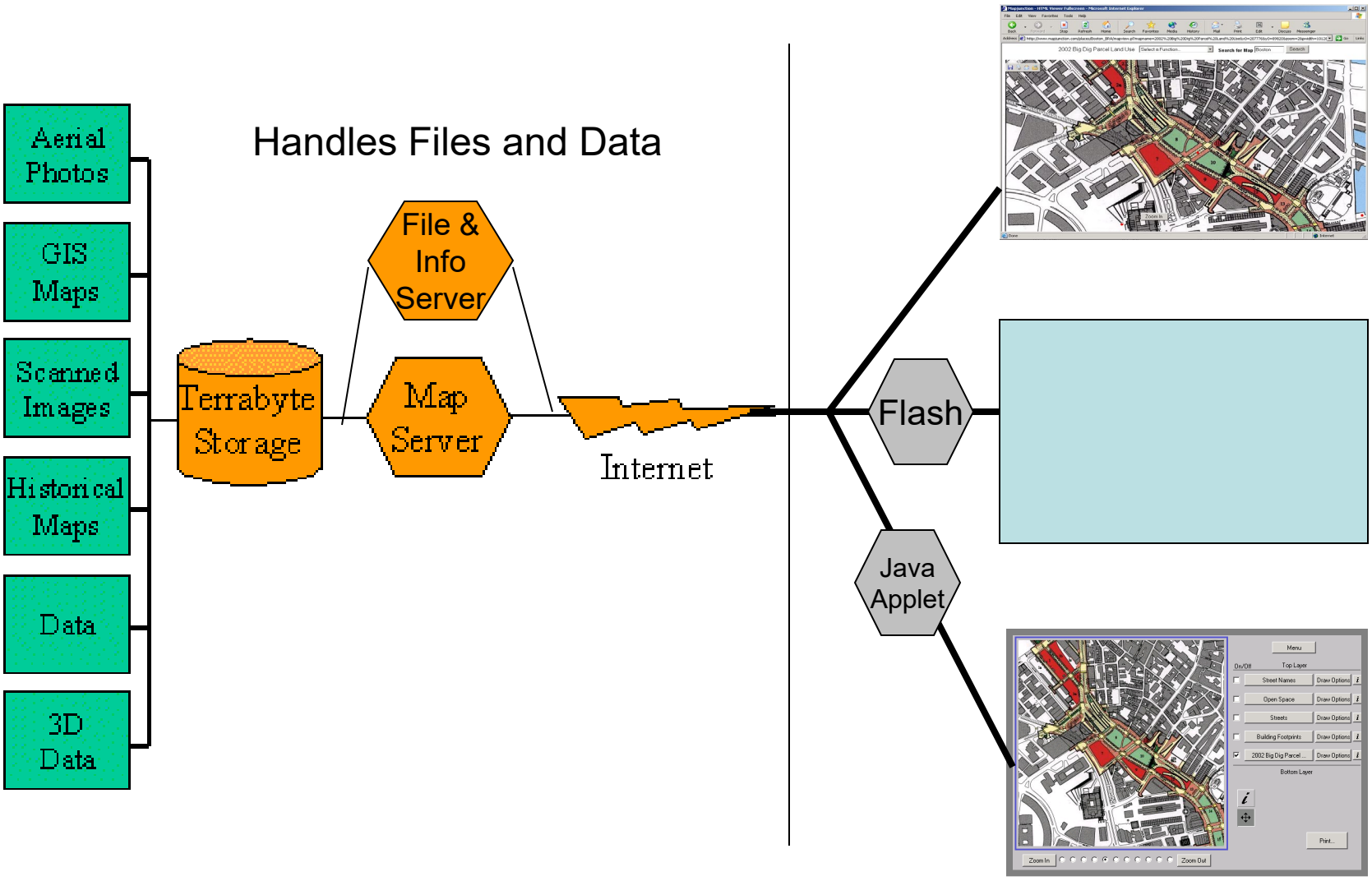






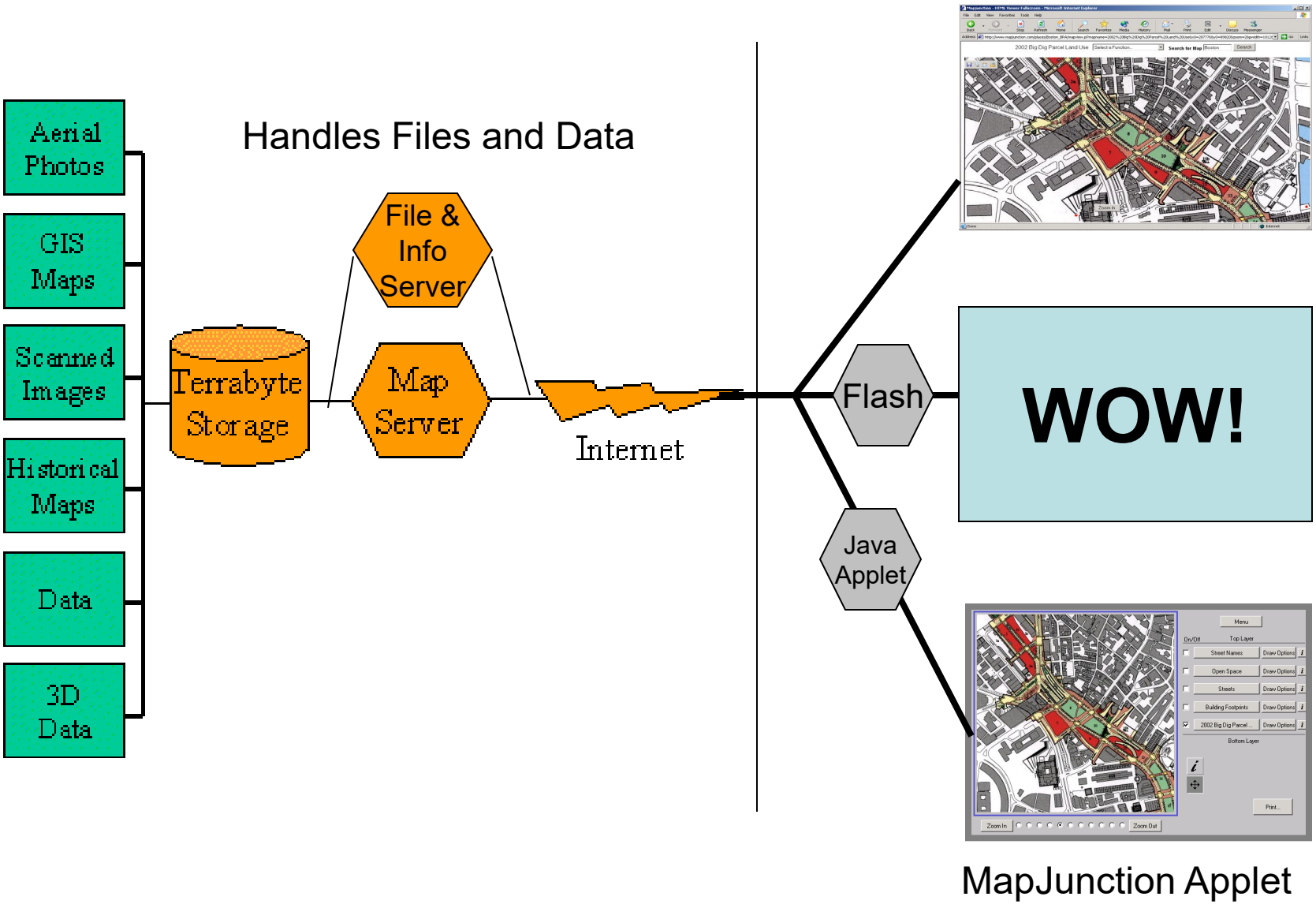
MapJunction Applet

Macromedia Flash



MapJunction Applet

Macromedia Flash



How to Develop and Fund this *Long Term Project*

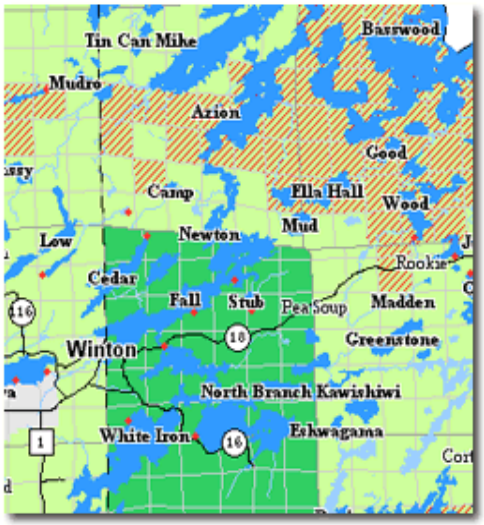
Open Source

MAPSERVER

Current Version: 3.6.3

Welcome to the home of the MapServer. MapServer is an OpenSource development environment for building spatially enabled Internet applications. The software builds upon other popular OpenSource or freeware systems like Shapelib, FreeType, Proj.4, libTIFF, Perl and others. MapServer will run where most commercial systems won't or can't, on Linux/Apache platforms. MapServer is known to compile on most UNIXes and will run under Windows NT/98/95.

The MapServer system now supports MapScript which allows popular scripting languages such as Perl, Python, Tk/Tcl, Guile and even Java to access the MapServer C API. MapScript provides a rich environment for developing applications that integrate disparate data. If the data has a spatial component and you can get to it via your favorite scripting enviroment then you can map it. For example, using Perl's DBI module it is possible to integrate data from just about any database vendor (eg. Oracle, Sybase, MySQL) with traditional GIS data in a single map graphics or web page. In addition, there is now a PHP/MapScript module included in the current release- thanks DMSolutions.



Sample image from MNDNR "recreation compass"

Of course, there is still the MapServer CGI application which provides a significant number of "out-of-the-box" features. Here's a sampling:

- vector formats supported: ESRI shapefiles, simple embedded features, ESRI ArcSDE (alpha release)
- raster formats supported (8-bit only): TIFF/GeoTIFF, GIF, PNG, ERDAS, JPEG and EPPL7
- quadtree spatial indexing for shapefiles
- fully customizable, template driven output
- feature selection by item/value, point, area or another feature
- TrueType font support
- support for tiled raster and vector data (display only)
- automatic legend and scalebar building
- scale dependent feature drawing and application execution
- thematic map building using logical or regular expression based classes
- feature labeling including label collision mediation
- on-the-fly configuration via URLs
- on-the-fly projection

MapServer is **not** a full-featured GIS system, nor does it aspire to be. It does, however, provide enough core functionality to support a wide variety of web applications. Beyond browsing GIS data, MapServer allows you create "geographic image maps", that is, maps that can direct users to content. For example, the Minnesota DNR "Recreation Compass" provides users with more than 10,000 web pages, reports and maps via a single application. The same application serves as a "map engine" for other portions of the site, providing spatial context were needed.

We're not done either. In the works are OpenGIS Consortium Web Mapping Testbed (WMT) compliance, productivity code and utilities to make developing applications even easier.

Overview

- History
- Mission
- Directors
- Staff
- Contact
- Search

Getting Involved

- Develop Software
- Host Data
- Volunteer

News

- Advocacy
- Demonstration
- Images
- Organization
- Partners
- Software

Events

<< November 2002 >>

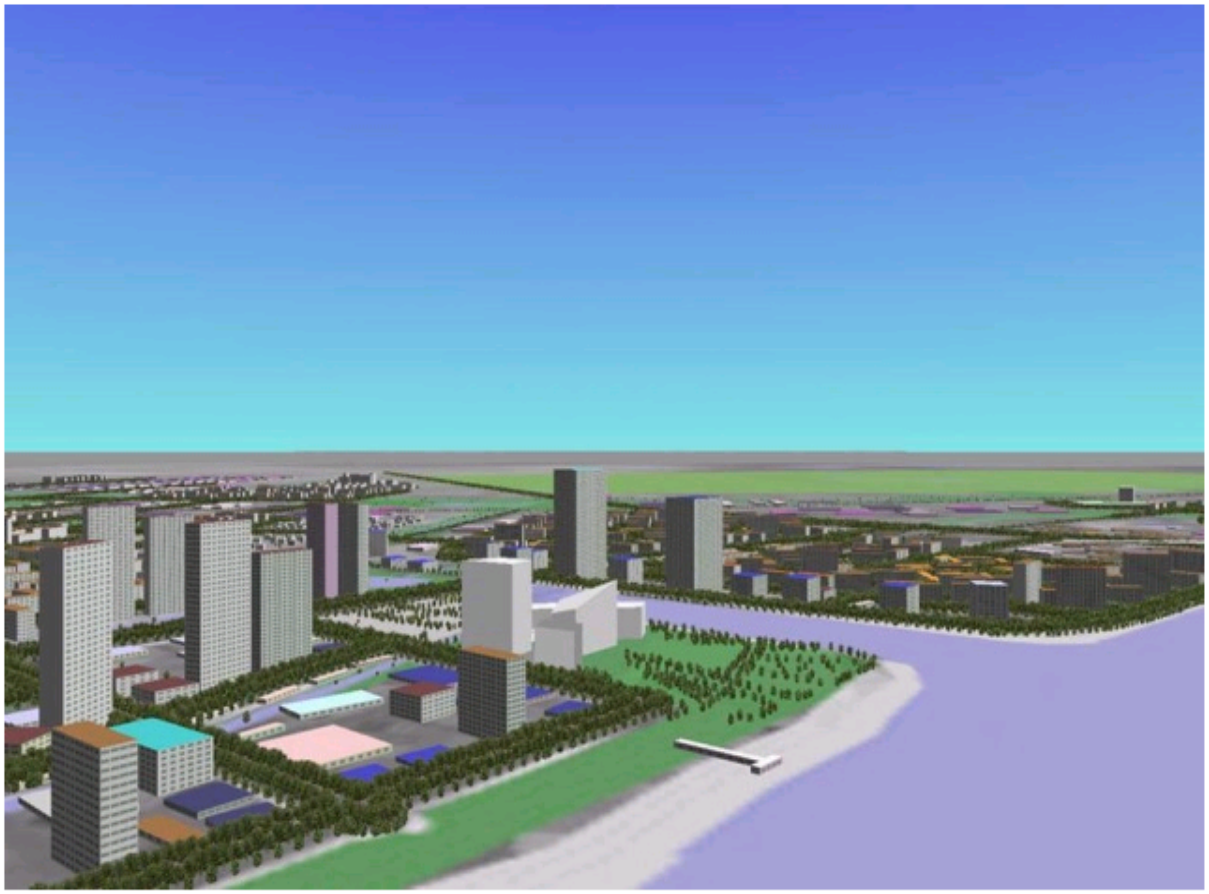
	S	M	T	W	T	F	S
>>	27	28	29	30	31	01	02
>>	03	04	05	06	07	08	09

Hangzhou (Harvard)

[print this photo on Shutterfly]

Gallery: Gallery Album: Hangzhou (Harvard)

2 (of 11)



Hangzhou, China (2)

Key Decisions

- Architecture of MapJunction Archive
- Decision to go Open Source
- Using Flash for the graphic interface
- Most important functionality for Big Dig

Fin

Fin

Fin

Fin

Fin

Fin

Fin

Fin

Fin